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CONTENTS

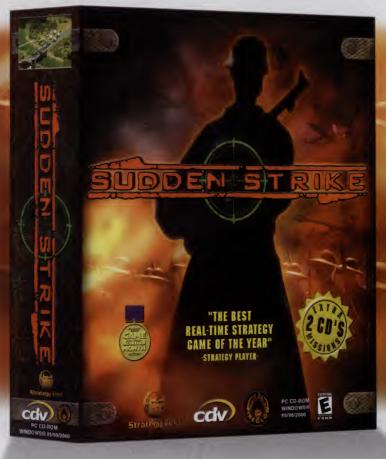**COMPUTER GAMES** — **ISSUE NO. 123**

MechCommander 2 — pg 50

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A Day in the Life

I read the news today, oh boy—Xbox is the future?
by Steve Bauman

With the imminent (or recent) arrival of the "next-next-generation" high-end console systems (you know the drill: Dreamcast, PlayStation 2, Gamecube, Xbox), it's time for the requisite, "Is the PC going the way of the dodo, or at least the way of the Amiga?" editorial. I really tried to skip this one; it's one of those year topics that pops up every few years that every pundit, paid lackey, hanger-on, and professional Monday-morning Quarterback tends to fall back on when inspiration wanes (for another example, consult last month's standard "Piracy is Bad, Bad, Bad" topic).

But I had an epiphany of sorts (and lived to tell about it) while playing Terminal Reality's *4X4 Evolution* online. Here I was, playing the game against a Macintosh and Dreamcast owner, and while the game may look and control slightly differently on each system, our overall gaming experiences were virtually identical. This got me thinking about a future where platforms are irrelevant, where there is no "console" or "PC" gaming per se, just gaming. And then I went to bed.

This little bout of introspection was additionally fueled, in part, by the Chicken Littles running around screaming about how the PC gaming market is in decline/a tailspin/a free-fall/headed for disaster/doing okay. Such comments tend to ignore history; as the PC has effectively been "in decline" every few years, but still manages to stay alive and kicking.

Gaming on the PC is unlikely to peter out any time in the near future. There are more gamers every single year, more PCs being sold, and too many developers who actually like developing computer games. However, a better question is whether the kinds of games we're currently playing—big budget, big productions—will continue to be produced in as large a quantity. The reason for this potential decline is the usual laundry list of negatives: too many games have saturated the market, there are issues with system requirements and configuration problems... you know the drill.

The PC has always held strong against the "console menace" because its weaknesses are also its strengths. Its games are perceived as having more depth and variety. The PC platform continuously evolves and absorbs new technology, reducing any performance gaps with a fixed console system in a matter of months. It's also a multipurpose machine, so people can justify its existence better than a fairly expensive (at least at launch) console, and it offers perks like editors and, particularly, multiplayer.

But as the consoles eliminate many of these perceived deficiencies, when do they cease being a console? These new machines deliver serious power and the ability for people to get online, with keyboards, mouse devices and even hard drives as either standard or optional features. They are, in effect, game computers, with the games and hardware becoming more and more PC-like. While the other console systems use custom hardware, the names associated with Xbox are the same ones powering your home computer: made by Microsoft, powered by Intel Pentium III processor, graphics by NVIDIA, broadband support, and a hard drive in the box. Is that really a console?

In the past, it's been easy for us to disregard console systems, as their staple of games is vastly different than your standard PC fare. A few months ago I spoke with Seamus Blackley—who in his past life worked at Looking Glass on such titles as *System Shock*, *Terra Nova* and *Flight Unlimited* (he also was the principle lead on *Trespasser*— something we'd all like to forget) and is now Director of Technology for Xbox—and he insists that Xbox will be like any console system, full of console-style games. But we're already seeing major PC developers announcing Xbox development, as their familiarity with DirectX makes creating the games a slightly less daunting task than learning the intricacies of the PlayStation 2. Most are saying they'll create "console-style" games as well, but the proof will be on the DVD, so to speak.

If the developers creating the games you've been playing the last few years migrate to a new console system, will you follow them? And slightly more pressing, do you want us to follow them? In other words, do you want to read about them in this publication? In other more specific words, what should we do with Xbox? (Confused yet?)

As our name is the generic *Computer Games*, we're not wedded to any single platform. We have covered the PC, Macintosh, Amiga, and Atari ST over the course of our 10-year existence. As each new console platform has been introduced, we've taken a cautious look at them, not only to check out the new technology (which is often quickly surpassed by the ever-evolving PC), but to see if the games are more, for lack of a better term, "PC-like." In our early days we covered strategy games for the Gameboy and role-playing games for the Genesis. We covered the 3DO system for nearly a year after its release, as it appeared to us that its CD-ROM and (at the time) incredible power would allow it to deliver more advanced "PC-like" games.

Any publication expanding their coverage runs the risk of giving the appearance of compromising the existing coverage. We've already run a detailed feature story on the Xbox specifications (to almost no protests), and will likely review it when it appears later in 2001. Is that too much coverage? Too little? Should we review or preview its original games? Should we have a column devoted to it? A special section? Or should we ignore it altogether?

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– James T. Kirk, stardate unknown

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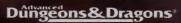
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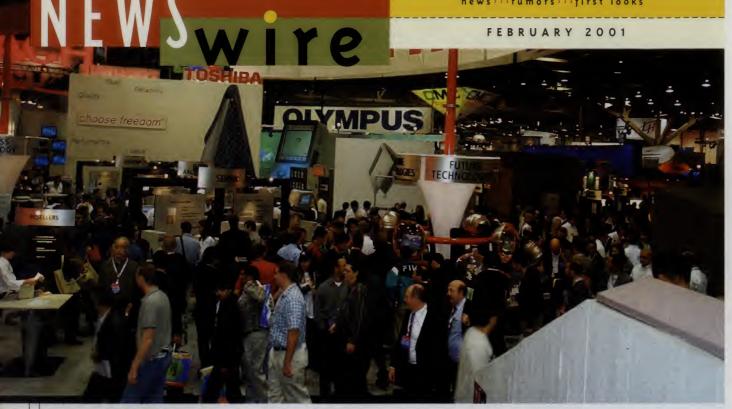
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This is the least-crowded area of Comdex.

Digging Up the Good Stuff

Uncovering the gaming hardware at the "all-business" Fall Comdex 2000

THE FALL COMDEX EXPO, WHICH TOOK PLACE IN LAS VEGAS ON Nov. 13-17, is one of the largest computer trade shows in the world. It spans over a million square feet of convention center space and over 250,000 people attend each year. For a gamer, it's really a pretty boring show—it's full of dot-com startups, e-commerce experts, handheld and mobile business products, and similar sleeping pills. This is not a gaming show; there are no ludicrously proportioned booth "models" shaking their bulbous parts to try to sell the latest 3D action-adventure game; if you want to find game-related stuff, you have to dig a little.

Some kids get down with the Tribes 2 beta at Intel's booth.

Since Comdex is a big conference for business professionals, there's a lot of business-related hardware at the show. But it's always good to check in to see what they're up to; if someone has hardware coming out in the near future, Comdex is where they show it off.

NVIDIA goes mobile

The big announcement from NVIDIA was its GeForce2 Go processor for laptop computers. From a performance standpoint, it's like having a GeForce 256 or GeForce2 MX in your laptop, with up to 32MB of either SDRAM or DDR RAM. Toshiba was announced as the first supplier of laptops containing the chip, which should be available in January or February of 2001. Other manufacturers will produce laptops with the chip as well—in fact, *Quake III* was up and running (and playable) on a prototype laptop from another manufacturer. Sure the chip is still a step behind the best on the desktop, but that's to be expected when you have to work within the stringent power and heat restrictions of mobile computing.

With the standard answer to, "What laptop should I get to play games on?" having always been, "laptops are great and fast, but the video needs a lot of help, so you can't really play all that many games on them," this GeForce2 Go starts to change all that. You won't get the blazing-fast framerates of the best desktop cards like a GeForce2 Ultra, but you can certainly get smooth play and full features on just about any game out there. And for a laptop, that's not too shabby.

NVIDIA has historically announced a new high-end desktop chip at Comdex, just weeks before it was available at retail. If history were to repeat itself, we'd have heard about the chip code-named NV20 at the show. They spoke with the press about the chip behind closed doors and under signed non-disclosure agreements. It's possible NVIDIA doesn't want to make two major product announcements at once and have one overshadow the other. The more likely answer is that the chip is

Ripping off The Matrix is an industry unto itself. ATI wins prize this year.

still too far from shipping, and NVIDIA doesn't want to harm possible GeForce2 sales by announcing the next best thing too early.

There's not much to save about the NV20, at least without violating the terms of the NDA. Yes, it will be a full DirectX 8 compliant chip, but NVIDIA has said as much already. The projected performance specs are largely meaningless until the final clock speeds are nailed down. There's one amusing anecdote; when the first GeForce2 chips came back from the plant in Taiwan, NVIDIA had *Quake III* up and running in only a matter of days, which was an impressive feat. For the NV20, the game was running in about eight hours, and that includes the time to put the chip on the board. NVIDIA seems to be getting very good at creating drivers under emulation.

The new 3dfx

3dfx made some pretty major announcements at the show. First, it canned the Voodoo5 6000. There will be no four-way SLI product from 3dfx. Instead, 3dfx licensed it to Quantum 3D, who already has the right to make 3dfx-based systems with up to 32 chips. Quantum 3D doesn't make or sell graphics chips, but rather entire computer systems sold to military and industrial simulation industries. So basically, there will never be a consumer graphics card with four VSA-100 chips on it, and the next thing you'll see from 3dfx will be its next-generation card. The company wasn't ready to say anything at all about it, except that they're confident it will be the best DirectX 8 accelerator on the market (a claim pretty much everyone makes). There was much talk about what 3dfx calls its "Mosaic" technology, which is the fancy word for the tile-based rendering technology it picked up with the acquisition of Gigapixel early this year. Will Mosaic technology be in the next 3dfx card? Probably not...Gigapixel was acquired too late in the product's development to change it so drastically.

3dfx's next big thing won't be announced until it *knows* it can ship it exactly when it says it can. After the fiasco with Voodoo5 products coming six months late, 3dfx doesn't want to promise what it can't deliver anymore. It's all part of what it sees as a renewed commitment to execution.

What's even bigger news is the new structuring of the 3dfx company. It's selling off the manufacturing plant in Mexico it acquired with STB, and will subcontract card manufacturing to a third party. The manufacturing plant wasn't running at capacity and was costing a fortune, and 3dfx certainly can't afford to

bleed away any more money. In the future, you'll continue to see 3dfx brand cards with drivers and support from 3dfx, just as you always have. They just won't be made in a factory that 3dfx owns anymore. 3dfx has its eye on other devices like PDAs, cell phones, and information appliances, but only as a technology provider. A company interested in making graphics chips for those kinds of gadgets can license 3dfx's technology (primarily the Mosaic technology from Gigapixel), but 3dfx won't provide actual parts.

AMD pushing forward

AMD was busy celebrating the phenomenal year it's had, taking over the Hard Rock Café and providing a little entertainment from rock band Lit. AMD had every right to celebrate—by all accounts, it exceeded expectations for both revenue and market penetration. The Athlon product line has proven to be a great thing for gamers. Even if you don't have one, the intense price and speed competition between Intel and AMD has given us all faster, lower-cost processors.

Moving forward, AMD plans to increase speed of Athlon processors throughout next year, starting with the chip code-named Palomino. Palomino is just like the current Athlon with on-die cache, only produced with a smaller manufacturing process that will allow the chip to run cooler and faster. You'll see speeds of 1.3 GHz early next year, progressing through 1.7 GHz by the end of the year. Combined with DDR memory, these should make some pretty fine gaming platforms. In the first half of 2002, AMD plans to release its new eighth- generation chips, code-named Sledgehammer and Clawhammer. These will be the first chips in its 64-bit line of processors, and while Sledgehammer is positioned at workstation and server markets, Clawhammer will fill those markets and also some of the high-end performance desktop market. It's far too early to know exactly what new instructions the Hammer family of processors will bring, but it's said they will support the SSE and SSE2 instructions found in the latest Intel chips. Will 64-bit computing be a boon for gamers? We'll have to wait at least a year to find out.

ATI and Matrox

ATI plans to introduce a new fully DirectX 8-complaint card next year, probably in the spring, but it's not yet ready to say anything about it. Between now and then, it's going to improve the Radeon line by bumping the speed up considerably. The new high-end Radeon products should have a clock speed somewhere around 240MHz (for both chip and memory). The whole Radeon line is going to get a speed bump, and these won't be sold as a new line. ATI is just going to re-tool the box to say "new enhanced performance" or something like that. These improvements shouldn't increase the price at all, either. ATI is just hoping to keep the Radeon line competitive by taking advantage of better memories and manufacturing processes. So if you're going to buy a Radeon, you might want to wait until late January or February when the new versions arrive.

Matrox, on the other hand, will continue to focus on its corporate desktop and video editing market products for the time being. The company is quick to point out that it has not given up on the high-performance gaming market, just that there's no product along those lines due for at least the next six months or so. The mythical "G800" that people keep rumoring about is, at best, a product for the second half of 2001. —*Jason Cross*

by Gores Technology Group) resulted in a decrease in its value that precipitated a reorganization that is still defining itself. Its representative referred to the organization as "the company formerly known as Mattel," and told us that the powers that be are hoping to move away from the perception of what had been the SSI "branding" of products. They are searching for a new identity... **GOD Gets Medieval**—Gathering of Developers announced that they will be publishing *Stronghold*, a PC game that combines city building and community management with intense

Pool of Radiance

real-time strategy combat. The game, set in the Dark Ages, challenges players to design, defend, construct and manage their own castles and establish settlements. It will include over 30 types of walls, towers and anti-siege equipment, 50 different structures, and a legion of troop classes are available for creating significant citadel and village detail. Simulation elements give players the opportunity to design and run a castle and fortress complete with lords, court jesters, village peasants and town drunkards. The game is being developed by FireFly Studios, a company founded by Simon Bradbury, Eric Ouellette, and David Lester—members of the *Caesar* and *Lords of the Realm* teams for Impressions. "Only the expert minds of Bradbury, Ouellette and Lester could design an ingenious and original title like Stronghold," said Mike Wilson, CEO of Gathering of Developers. "This game allows players to reach back in time to recreate and experience medieval life." *Stronghold* is expected to release in the fall of 2001...**More Delays**—Eidos announced that the release date for *Startopia*, the "highly-anticipated" (by someone) strategy title from the unfortunately named Mucky Foot (a bunch of former Bullfrog people responsible for the underrated *Urban Chaos*), has slipped to February. The company stated that the reason for the delay was so that Mucky Foot had ample time to refine the game's AI and to add better multiplayer support. Rebecca West, Product Manager at Eidos said, "We   **>>>**

A peek into the design process of an Origin creature.

Let's Talk About Ultima Online
Medieval fantasy fans descend on Austin for World Faire 2000

PLAYERS OF MASSIVELY MULTIPLAYER ONLINE ROLE-playing games adore talking about their favorite pastime. They discuss the issues while in the midst of playing the game. They post on an astounding array of message boards. They rant, they praise, and they dream of how their favorite fantasy world should be. Most of this abundance of communication goes on with little interaction from the people who run the game. With about three years of service under it's belt, *Ultima Online* may be one of the granddaddies of the genre, but players have had few chances to interact live with the team behind the game. That all changed November 10-11, 2000 with the first official *UO* World Faire, where more than 700 fans had an opportunity to not only express their opinions about the current game but take a sneak peek into the future of the *Ultima* world.

The fans that showed up at the Faire are some of the most involved and concerned players out of that large number. They are the dedicated souls who create and run player towns and the ones who volunteer their time to help other players. One player in attendance quit his job recently to play the game for a living. He expects to make $30-$50,000 this year as a virtual real estate agent. In other words, the attendees of the Faire are the ones who have the most invested in just what goes on in Britannia today and tomorrow.

Listening to the fans
"We're actually more interested in what you think the future of *UO* ought to be," explained Gordon Walton, VP of Online Services for Origin. "And of course, you're going to have very diverse ideas about what that is, but since we're kind of responsible for making that happen, we'd really like to hear from you what those are."

While that may sound like something you'd expect from the standpoint of public relations, it did seem to be the case at the small sessions held by members of the team. The team members started most sessions by throwing out possible directions for *UO* and then they gave the players an open forum to discuss what they thought. Team members were constantly making notes after exclamations of "That's quite a nice idea!" The *UO* team does have player mistrust to overcome, however, as evidenced by random mumbling around the Faire of "they just take notes so we'll *think* they're listening." In a final wrap up session, more than a few players tried to get some sort of commitment out of the team that they would at least post a list of the notes they gathered so that players who couldn't attend would see the ideas.

One session did stray from the "tell us what you think" formula. The subject was "grief players"—those who spend all their energy in the game to ruin the experience for others. It's a hot topic in all the online games, and the player base seems to have little understanding of just what is and can be done about it. Customer service representatives from both Electronic Arts and Origin were quite detailed in their explanation

A mage shows off one of the new spell animations, which will be unique to each spell in the game.

of what is being done. They were also very adamant in stating, "Report them. We want them out."

Every time someone reports an incident of harassment or using borderline illegal tactics to interfere with others, a representative makes a note on that player's account. If enough reports are noted, there is a long string of repercussions. They try to give the benefit of the doubt to people, so the first step may be to just talk to them about what they're doing. If the behavior continues, they can suspend accounts, or given more offenses, an outright ban will be done. If a player is banned, Origin will go so far as to repossess everything that person's characters owned so that they have less incentive to try to come back with another account.

A new age dawns

Although the focus of the event was UO as it exists today, Origin kicked off the Faire by announcing its new 3D upgrade, Ultima Online: Third Dawn [CGM 122]. Rick Hall, Third Dawn's producer gave a guided tour of what the new client offers. "We didn't have the ability to update, to add new graphics on the fly," he explained. "If we wanted a new monster, the way we had to do it was take an old one, color him blue, and put a different label over his head. It was really kind of cheesy. The main focus of the new client is actually to give us the ability to update, so we rewrote the client almost from the ground up."

Hall made a point of reassuring players about the future of UO. "I heard a lot of people talking over the past few months as OSI is getting prepared to put Origin out on the market. Everybody's thinking, 'What's that going to do to this game? Does this mean they're going to cancel the project?' I think the timing of Third Dawn is really kind of important. I think it's pretty obvious from this client that UO is not going anywhere."

Many times when OSI has released major patches or upgrades to the game, things have gone terribly awry. Emergency patches would ensue, and there was much Origin-bashing going on amongst the player base. Hall has high hopes for a smooth and clean release of Third Dawn. "We have plenty of time for a polishing pass, actually a couple polishing passes. OSI has definitely said they don't want to release this thing until it's good. We're not giving people a ship date because we're not shipping until it's ready. Ready doesn't mean debugged, either. Ready means debugged, polished and smooth."

A brand new Britannia

Third Dawn isn't the only update to Britannia that OSI has in the works. A separate team is working to bring you Origin, a totally new take on the Ultima world, with a visual style more akin to EverQuest or Asheron's Call than the current Ultima Online. Purists may be shocked by some of the changes. "Unlike previous Ultimas which were just straight medieval fantasy, we've introduced an event that has taken two lands from the future and past of Britannia," explained Starr Long, Origin's producer, during a whirlwind tour of the game at OSI's headquarters.

The Origin team used motion capture sessions with martial arts experts to add visual flair to the combat in the game. When you see a highly skilled fighter character in action, you'll know it just by watching. According to Long, when you start off the game, you're going to have the standard attacks. But as you progress in the game, you learn more and more combat moves. You start off with those basic slashes but then you get like spins and flips. "We've recorded several hundred different combat moves including some just crazy wire work like you see in Hong Kong action flicks. We have stuff where you jump up in the air, corkscrew horizontally and then kick somebody in the face. It's really, really fun stuff."

Player-versus-player activity will only be allowed in certain zones, with other areas being safe to adventure without worrying about other characters attacking you or trying to steal from you. The exact ratio of safe to PvP zones isn't decided yet. "Right now it's anywhere between 40/60 and 50/50. We'll play with that during the beta and see what dynamic is successful".

Player owned housing is one of the big draws in Ultima Online. The Origin team has taken some lessons from the system implemented there. Many will be disappointed to hear that there will be no player housing in the initial game release. However, the development team realizes it's an important feature, and they have plans in place to implement housing as soon as they're sure everything else in the world is up and running well. "We've looked at things that we'd like to improve on how housing works. When we do implement it, you won't be able to just place a house anywhere on the map. We've actually gone and placed all the player-housing plots on the map. They're preset locations. We did, like, urban planning, basically."

Right now is a wonderful time to be an Ultima fan. With updates to the current world coming soon, a brand new game due sometime next year, and enthusiastic teams working on both of them, every person who's ever fallen in love with Britannia should find a version of it to call home. —Merrie Rickmann

know that strategy game fans will be disappointed by the delay on this excellent game, but neither we nor Mucky Foot would be happy releasing it until it is the best that it can possi-

Startopia

bly be." In what is surely completely unrelated to this delay, Eidos CEO Charles Corwall resigned, "to spend more time on his Technology and Mining interests in the USA and South Africa." COO Mike McGarvey assumed the position. "Eidos is entering a new chapter and I look forward to working closely with the rest of the management team to take Eidos forward to the next stage of its development," said McGarvey. "Our strategy is to focus and build on our successful core business and to deliver value for shareholders." And maybe deliver a couple of good games… Red Storm announces Bio-Strike—Newly acquired (by UbiSoft) Red Storm announced a deal with developer Holistic Designs (creators of Machiavelli: The Prince and Emperor of the Fading Suns) to publish Bio-Strike, a real-time strategy game about biological warfare and corporate intrigue. Ken Lightner, who worked on Machiavelli and Warhammer 40K: Final Liberation is heading up the project for Holistic. "Working with Red Storm on a Tom Clancy project has given us a chance to combine some of the best elements of a modern strategy game-corporate takeovers, highly trained assault teams, computer hacking, research on the cutting edge of science, and more," explained Holistic Director

The Settlers IV

Andrew Greenberg…. Even More Delays—Folks waiting for Blue Byte's The Settlers IV (and you know who you are) will have to wait a little longer, at least until this month. It's scheduled for release in January 2001, and will be available only from Blue >>>

A Meer, one of the playable races in Origin.

Instead of just growing huge trees, Origin's city of Yew actually is a huge tree. A very huge one.

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Byte's website (www.bluebyte.com). "This was a very difficult decision for us to make," explained Thomas Hertzler, CEO and owner of Blue Byte. "Judging by the online preorders, and the retail orders in Europe, we know that a lot of gamers have been really looking forward to the release of *The Settlers IV* this year [2000], and we obviously understand their disappointment. However, at the end of the day, we have also made this decision with *Settlers* players in mind. We know that the game won't be ready before Christmas, but fans will be getting a game that lives up to Blue Byte's high standards."...**3DO signs Jonny Moseley**—Dude! Jonny Moseley won the first medal for the U.S. in the 1998 winter Olympics in Nagano, earning the gold in the Mogul competition. The skier has signed a deal to star in a series of extreme skiing games produced by 3DO for next-generation gaming systems. Moseley will co-design the games, featuring the locations, equipment, techniques, and lifestyle that are marking a revolution in skiing today. Big mountain heli-skiing, moguls, terrain parks, big air, kickers, rails, twin-tip skis, skier-cross, and the freestyle movement will have their first opportunity to be included in the next generation of video games. "I'm super stoked to have the opportunity to create and star in my own next generation video games where I get to do whatever I want on my skis," said Moseley. "And let the games begin." Woah. 3DO intends to have the first of the skiing games available before the 2002 Winter Olympics in Salt Lake City, where Moseley will defend his gold medal. In the announcement, 3DO made no mention of exactly what they

Deus Ex

mean by "next generation gaming systems," so it's currently unknown whether the game will appear on PCs or only on dedicated console systems such as Playstation2 or Xbox...**Deus Ex wins BAFTA**—In what is surely the first of many awards, BAFTA (the British Academy of Film and Television Arts) named *Deus Ex* PC Game of the Year. BAFTA is the UK's leading organization promoting and rewarding the best in film, television and interactive media. "Winning the BAFTA for PC Game of the Year is just unbelievable. I've >>>

Serious Military Fantasy
With Kohan, TimeGate Studios combines their arms

Several formations are selectable, balancing company speed with combat ability. Units in battle mode may not move fast, but attack at full strength. Skirmish or column formations limit combat effectiveness.

IT'S BEEN MORE THAN FIVE YEARS SINCE SSI'S *FANTASY General* applied serious military treatment to the realm of knights and dragons. Mastery of combined arms tactics in the form of airborne dragons, ranged archers, and lightning-fast cavalry was necessary to insure victory. Last year, Strategy First surprised us with *Disciples: Sacred Lands.* Deceptively simple to play yet difficult to master, combined arms once again proved to be the yellow brick road to success. Now Strategy First is teaming with TimeGate Studios' to deliver another serious fantasy game *Kohan: Immortal Sovereigns.*

The Kohan are mostly immortal beings that are being reawakened in a world called Khaldun. Bereft of memories from their past, the Kohan are slowly regaining awareness and the realization that they are locked in a struggle with the forces of shadow. In a world fractured by squabbling nations and infested with critters of evil, the Kohan must bring unity and victory for the armies of light.

Once again, players must leverage combined arms tactics for victory. Rather than commanding individual units, players must learn to manage companies containing up to seven individuals. The number of companies a player controls is based on the number of cities controlled, up to a limit specified by the scenario. Companies can take a lot of damage, and can regenerate to full strength as long as a single individual survives combat.

The company is comprised of four line units, two support and one leader. Leaders may be a default captain, or one of the immortal Kohan, each of which has a special ability. Kohan are much more powerful than mortal units, and while they can't be permanently killed they can be knocked out of action, requiring a fee to get them back in action.

Selecting the company flag allows the player to

Rollups containing vital information from building options to short biographies on individual Kohan are easily accessible.

monitor its individuals as well as issue orders. Enemy units encountered will automatically be engaged, with ranged weapons keeping a respectful distance if possible (and vulnerable in close combat). Enemy structures must be explicitly assaulted. When it becomes necessary to withdraw from battle, an orderly retreat (specifying the rally point) or a general route can be directed by a single click. Individuals within the company cannot be ordered, dramatically reducing the amount of clicking involved. While *Kohan* is a real-time game, it can be paused (and orders issued) at anytime.

There are plenty of other features in the game—multiple campaigns, eight-player games with network play, alliances with other players, and the standard neutral cities for you to conquer and build up your forces. With a dearth of fantasy games on the horizon, perhaps *Kohan* will be one to watch out for when it's released in early 2001. —*Jeff Vitous*

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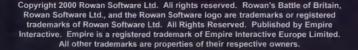- Fly five authentic aircraft including the famous Spitfire and Ju87 Stuka dive-bomber
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been associated with award-winning games before but none of those awards were as prestigious as this," said Warren Spector, Project Director for the game. "What makes the award especially meaningful is that, during development, we didn't really know how people would respond to what we were doing. The Deus Ex team worked incredibly hard to give players an experience unlike any they'd had before. I can't tell you how great it is to know that all that work paid off, that people recognize the value of what we were trying to achieve." ■

TOP sellers

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2 THE SIMS
Maxis
Price $42 • Rating ★★★★½

3 LOOPY LANDSCAPES
Hasbro Interactive
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13: Red Alert 2
Westwood Studios
14: Madden NFL 2001
EA Sports
15: Age of Empires II
Microsoft

Sales for October 2000. Source: NPD Group, Inc.

Daimyo All to Hell
Shogun Total War expands with the Warlords Edition

Tactical maps can really encapsulate the action.

FOR A LONG TIME, STRATEGY GAMERS HAVE WANTED something that would offer them turn-based strategy in addition to a real-time tactical combat system. Well, in Summer 2000, they got their wish. The highly acclaimed *Shogun Total War* is a multi-layered epic game that delivers both. For those from the Strategy-First-Strategy-Only set, however, there is the option to completely bypass the tactical battle engine in favor of all-strategy solutions. Now, producer Dreamtime Interactive and publisher Electronic Arts are working on a full-featured add-on, *Shogun Total War: Warlords Edition*.

The newest scenario involves the invasion of the Mongol hordes during which Kubla Khan's armies try to conquer Japan in the greatest external threat the Samurai ever faced. New strategy map scenarios will take you straight into the high-level conflicts of the Sengoku Jidai. In this way, you will be able to jump directly into the hard-core action without having to work through the entire technology tree. The strategy map is much more intuitive, as it is now easy to identify generals and heirs on the map. It is also easier to

Standoff at the Ninja Wall.
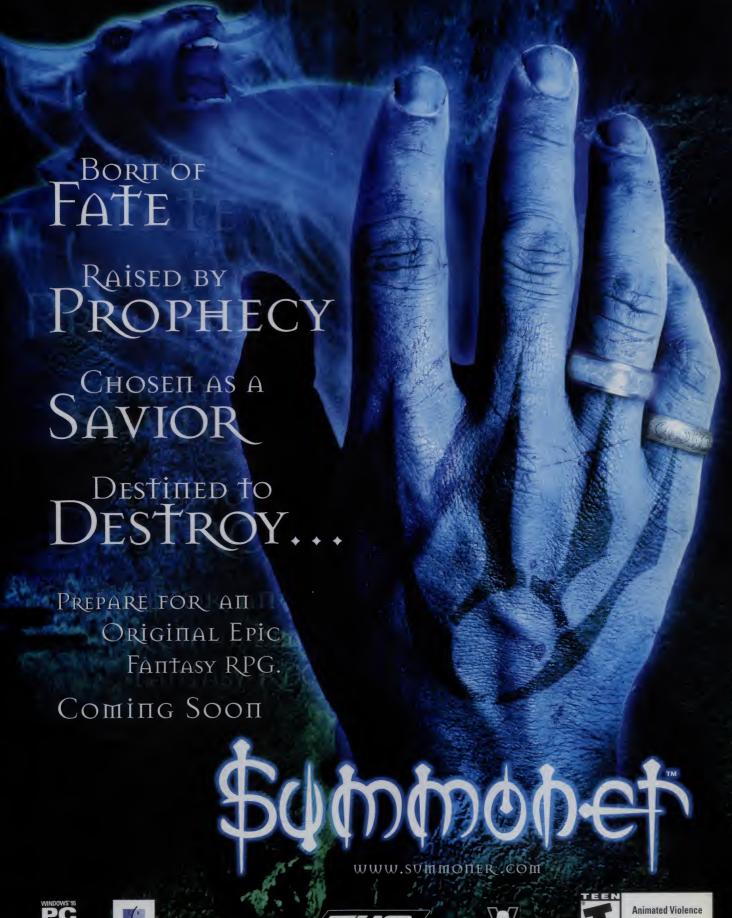
review your regions and building tree; and it is possible to see ports and trader ships on the map. New map types will include coastal regions and lakes as well, and they are also tossing in a map editor to create and share maps. A scenario editor will allow you to define the strategy map start position and set up your own campaigns for either single-player or multiplayer games in which two to eight players can now compete over LAN or the internet.

Surrounded by a lot of new full-motion video and artwork, there will be over six new battlefield units including Kensai (Sword Saints); Battlefield Ninja, Korean Auxiliary Infantry, and the fearsome Mongol Cavalry. New building and region upgrades will include a Drill Dojo to improve your armies Discipline (a new Unit Statistic), endurance and a Strategy School where your Generals can receive the wisdom of Sun Tsu's Art of War.

Warlords introduces campaigns of the Three Unifiers in which you will fight the battles of Japans most prominent Daimyo (Oda Nobunaga, Toyotomi Hideyoshi & Tokugawa Ieyasu) in three single player campaigns consisting of six battles each. In addition to the "wipe 'em out" tactics of *Shogun Total War*, you will be able to employ new types of battles where your task will be to kill the enemy Daimyo or to capture tactical points such as castles. You can use your Emissaries to bribe enemy generals to join your cause and use Ninja to infiltrate enemy castles to break a siege—with complete control of when and where reinforcements are deployed.

They have streamlined the camera manager and the battlefield controls to make them even more intuitive, and they promise better pathfinding and tactical AI—as well as "no obvious cheating" for the AI. Leaders should be harder to kill in battle because of better Daimyo AI.

The game will ship bundled with the original *Shogun*, and should rise from the feudal dust—along with its new visible dust rising from the infantry—sometime in spring 2001. —*Cindy Yans*

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BATTLETECH
Past, Present & Future

Computer gaming has always had a close relationship with traditional pen and paper games. Everyone knows the influence *Dungeons & Dragons* has on computer games, but beyond that, few have the appeal and support of FASA's *BattleTech* universe, a game system simulating 31st century warfare in all of its giant-robot glory.

There's something undeniably appealing about taking command of a multi-ton machine of mass destruction, and that's always been the heart of *BattleTech*'s appeal. The star of the gameworld is the BattleMech, a fusion-powered humanoid-shaped bipedal war machine standing between over ten meters tall and weighing as much as 100 tons and loaded to the teeth with autocannons, missile launchers, and beam weapons. Each is piloted by an elite soldier—a MechWarrior—essentially a knight, with the BattleMech a suit of armor. MechWarriors are the popular heroes of the 31st Century, whose exploits in battle are the stuff of legends.

BattleTech has always been more than just a game to its players. Novels, miniature figures, and a whole library of technical readouts complement the game world. The whole package is a chivalrous mix of action, treachery, romance, and war, played out across the Inner Sphere of known space and beyond. It's largely this great depth that has made BattleTech attractive to computer game developers for the last 10 years, from games like *The Crescent Hawk's Inception* to Microsoft's newly released *MechWarrior 4: Vengeance* and its upcoming *MechCommander 2*.

In this feature story, we take a look at the founding of FASA and the evolution of the BattleTech world, and what this has meant for computer gamers. We follow that up with a review of and tips for the latest digital representation of the series, Microsoft's *MechWarrior 4: Vengeance*. Finally, we crank up our scanners and give you a readout of the upcoming strategy game *MechCommander 2*.

It's a good time to be a MechWarrior.

PAST

Kex's Mech uses a Med Laser on an enemy Mech.

Hit Right Torso, Critical!

Some of the enemy humans have fled?

Walk
Run
Jump
Use Weapons
Kick
Computer
Scan Unit

PRESENT

FUTURE

MechWarrior/Crescent Hawk's Inception   **MechWarrior 4: Vengeance**   **MechCommander 2**

The Rise and Fall and Rise of BattleTech

FROM A PAPER ROLE-PLAYING GAME TO NETWORKED GAME PODS, IT'S BEEN A WILD RIDE FOR JORDAN WEISMAN

by Tom Chick

When Jordan Weisman dropped out of college in 1979, he had big plans to create centers for multiplayer computer gaming. "I viewed it as a role playing game where instead of using your imagination to visualize everything, you would use networking computers to do an audio/visual simulation," he recalls. "I went to try and raise money and everyone basically said, 'we have no idea what you're talking about and the technology doesn't exist.' Back then, network computing was basically unheard of. The only simulators that existed at the time were these giant mainframes for millions of bucks. So basically, I got laughed at a lot by venture capitalists. So I said, all right, I'll take these ideas and apply them

to paper games, which I'd been playing a lot. So I started a paper game company."

Weisman founded FASA in 1980 with $700 (the acronym stands for Freedonian Aeronautics Space Administration, a nod to the fictional country in the Marx Brothers movie *Duck Soup*). After a few years of licensing properties for role-playing games based on *Star Trek*, *Dr. Who*, and *The Last Starfighter*, FASA hit pay dirt with a tactical combat game featuring giant anime-inspired robots. "We licensed the imagery through a Japanese model company that had the rights to produce models from several different Japanese anime shows," Weisman says. "For us, the anime influence was pretty much just the physical structures themselves. The stories behind those things are very Asian, but what I wanted to do was a very Western-based story. The only thing that came over were those initial visuals. FASA licensed a total of 16 designs, none of which made it into any of the computer games. In fact, all 16 were phased out of the *BattleTech* universe as of about five years ago; the mythos now consists entirely of FASA's intellectual property.

"We then wrote an entirely new story for them, a new universe, and this is where I spent most of my time ripping off history," he

BattleTech on the PC

WHAT GOES AROUND, COMES AROUND

Surrounded by the graphical splendor of today's BattleTech games, it's easy to forget how long FASA Corp.'s gameworld has been gracing our PCs. Since the late 1980s, there's always been at least one BattleTech game lurking about, though there have been a few dry spells. Here's a brief chronology of 'Mechs for DOS and Windows.

BATTLETECH: THE CRESCENT HAWK'S INCEPTION
Infocom (1988)

Developed by Westwood, this was mostly an adventure and role-playing game. You played Jason Youngblood searching for his

father, and there was a lot of standard RPG stuff in it, plus the added bonus of eventual 'Mech combat. Simple EGA graphics seemed pretty good at the time, and the game was fun, capturing a lot of the flavor of the original *BattleTech* game.

MECHWARRIOR
Activision (1989)

It was EGA, it was untextured polygons, and it was pretty cool. This Dynamix-developed game was difficult, too; you were a mercenary commander, and had to buy your own ammo and pay for repairs. There were
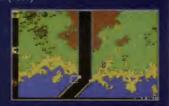
lots of nice features here, some which didn't show up again until *MechWarrior* 3, and some which we've yet to see again. Control was problematic, though, making the game harder than most gamers wanted.

MECHFORCE
Amiga Shareware (1989)

Created by Ralph Reed while he was in the Air Force, this Amiga shareware game was every *BattleTech* player's dream. It was an unauthorized, turn-based, highly detailed adaptation of the board game's combat rules, with a map editor and eventually a full 'Mech factory and rudimentary role-playing and campaign elements. No it's not a PC game, but there have been some bootleg conversions attempted, and maybe even successfully...if you can find them.

BATTLETECH: THE CRESCENT HAWK'S REVENGE
Infocom (1991)

With *Revenge*, Westwood was trying out some real-time strategy elements. The VGA game resembled *MechCommander* in a lot of ways, though it was often actually more tactical and detailed. Actually copyrighted in 1989, when it was released for other platforms, the PC version

was an extremely difficult, but also very good, game of 'Mech combat. The real-time game system was new then, and made for very exciting battles as you led Jason Youngblood in his fight first against, and then for, the Clans.

MECHWARRIOR 2
Activision (1995)

The long hiatus in PC 'Mech titles during the early 1990s was ended when Activision released *MechWarrior 2*. Though the game took some liberties with *BattleTech* rules (who could forget the bizarre "blue balls of plasma" PPC shots that were easily dodged), and offered difficult missions with often unfathomable goals, it also gave us good-looking SVGA graphics (upgraded to 3D-accelerated standards eventually), two Clans worth of 'Mechs to pick

The interior of one of the MechWarrior pods.

recalls. "Really, the whole story of *BattleTech* is the tale of the Roman successor states, pretty much literally." The basis of the *BattleTech* universe is several kingdoms battling each other to regain the glory of a fallen empire. It has an effete, war-wearied motif much like the decline of the Roman Empire.

BattleDroids

The first tactical giant robot combat game debuted as *BattleDroids* in 1982. The first run of 5,000 copies sold out quickly and they were preparing a second run when a letter arrived from lawyers representing LucasFilms. "They said, '*Droids*' is a trademark of ours and you have to stop using it.'" He says they pulled out Asimov and about 10 other books from the 40s and 50s that used the term "droids" and decided to fight Lucasfilm. "I probably would have except for the fact that at the same point I was negotiating for the *Star Wars* license." So he changed the name to *BattleTech* for diplomatic reasons, only to have the *Star Wars* RPG license slip through his fingers anyway.

"There was a complicated history there, where we actually had—well, never mind, it just gets ugly." Weisman seems like he could relate a thousand misadventures, but he's intent on explaining the roller coaster ride that is *BattleTech*, one of the most storied licenses in gaming.

Multiplayer gaming

As FASA grew, Weisman didn't lose sight of his original plans. The company invested its profits in research and development to realize his idea of multiplayer gaming centers. "We went off and created our own graphics computers and our own networking cards, because at the time there weren't any. We built it all piece by piece. We built our first center, which was really cobbled together as a bailing twine and duct tape kind of affair." These early custom-built gaming pods featured $7500 graphics cards cooled by 17 fans running displays on seven monitors. Thus the first *BattleTech* Center was born in Chicago in 1990. The second followed in Tokyo two years later, with a third and fourth in California the year after that.

"The first centers were enormously successful. We couldn't keep up with them. It was just phenomenal. We kept building more of them and larger and more and more grand. But the later centers were more ambitious and more extravagant and weren't clearing enough profit." Eventually, the Centers shut down in 1997 and other venues with revenue sharing plans claimed the pods. But Weisman had found, in the meantime, a number of computer game companies interested in licensing his *BattleTech* universe. The first company to hold the license was Infocom,

famous for its text-based adventures like the original *Zork*. It created two RPGs, *Crescent Hawk's Inception* and *Crescent Hawk's Revenge*. Activision eventually acquired Infocom and the *BattleTech* license as well. The first game with the Activision name was a 1989 'mech sim with RPG elements called *MechWarrior*. So far, so good. But after this first title, the license languished for six years as Activision dithered. As the contract was coming up for renegotiation, *MechWarrior 2* had been in development for four years and still hadn't been released.

"They weren't treating the license with the focus we thought it deserved. We had built all these *BattleTech* Centers with our technology team, so we wanted to take that team and create our own in-house development for computer games. So we approached Activision with the concept of us becoming a developer of our own properties for them. Basically we wanted to set up FASA Interactive as a publisher and Activision would be the distributor, but they weren't interested in that relationship." So Weisman approached his friend Gilman Louie at MicroProse, who was eager to buy the license, but wanted his own sim developers in Huntsville, Maryland to develop the game. "At the time, the Huntsville team was the best sim group in the world," Weisman says. "Besides, we didn't want to take on *MechWarrior 3*; we wanted to take on *MechCommander*, which was a new line [of tactical real time strategy games] we wanted to introduce." Four months after FASA signed with MicroProse, Activision's *MechWarrior 2* hit the shelves and started selling like hotcakes. So they renegotiated with Activision to let them do the *Mercenaries* expansion pack while work continued in earnest at MicroProse.

The MicroProse implosion

And then MicroProse began a slow agonizing implosion—it took the Hasbro acquisition a year or so later to staunch the bleeding and breathe life back into the company. In the process, the Huntsville team working on *MechWarrior 3* basically disintegrated and the project fell into FASA's lap. "We weren't able to capitalize on any of their work after they splintered into the wind," Weisman says. "So we started over to develop it ourselves." But as FASA struggled to create PC based technology after years of working on their own homemade pods, MicroProse lost patience. "They introduced us to Zipper Interactive and basically said 'we'd like Zipper to take it over.' We looked at Zipper's engine and said 'yeah, that's a better engine than we've got right now.' And as much as it hurt to let go of the project, we agreed to let them do it." Weisman says the relationship wasn't always smooth after that. As the face of MicroProse

The Tesla Series cockpit; one of the first networked games.

from, and almost unlimited customization options. Control was solid, and with the *NetMech* add-on (1996), you were able to take on other 'Mech jockeys from around the world (when it worked, and if Kali held up). This game established the basic paradigm for all 'Mech sims to follow.

MECHWARRIOR 2: GHOST BEAR'S LEGACY
Activision (1995)

Brutally difficult, and infuriatingly nosy (it kept track of how many times you retried a mission, and you couldn't access all of the game's features if you restored a saved game even once), this expansion pack added new undersea and outer space environments and a few new 'Mechs.

MECHWARRIOR 2: MERCENARIES
Activision (1996)

Mercenaries returned to the series' roots, with you once again controlling a bunch of hired guns. The game was linear, with limited

room to branch out, but patches added things like dynamic salvage and 3D support at least. Some of the missions were impossibly difficult, but the lure of adding to your arsenal by capturing 'Mechs and supplies was compelling. Of all the *MechWarrior 2* games, this one looked and played the best.

MECHCOMMANDER
MicroProse (1998)

The first PC BattleTech strategy game since *The Crescent Hawks' Revenge*, FASA Interactive's *MechCommander* looked great and mostly delivered on its promise of real-time 'Mech strategy. The missions were very puzzle like, though,

and the game got ridiculously difficult about two-thirds of the way in. There wasn't much in the way of AI, either, and a lot of the *BattleTech* rules were pared down during design. Still, it was often a blast to play, and the *MechCommander Gold* version fixed a lot of the original's problems.

MECHWARRIOR 3
Hasbro (1999)

The three years between Mercenaries and *MechWarrior 3* saw a lot of changes in the *BattleTech* computer game landscape. Activision lost the FASA Corp. license to Hasbro, and ultimately Zipper Interactive developed the next 'Mech game, for Hasbro Interactive—which in turn sold the license to Microsoft, the new owner of FASA Interactive. The result was a game that had perhaps the most company logos ever placed on an install screen. Luckily, *MechWarrior 3* was a solid, good-looking addition to the series, with a lot of plusses. Visually, it was (and still is) stunning. The AI was weak, and you could often cobble together certain chassis and weapon combinations that would be nigh-on invincible, but overall the game was a winner. The add-on, *Pirate's Moon*, added new 'Mechs and weapons, and tweaked the AI a bit. *—Robert Mayer*

changed after the Hasbro deal, the initial enthusiasm for FASA's mech games seemed to dwindle.

"The new people there were not as much into it. They didn't view it as a prime direction for their company. And when they sold to Hasbro, we decided we needed to look for another distribution agreement." So FASA began to look for another publisher. They couldn't have landed a bigger fish than Microsoft. But Microsoft proposed a novel idea: rather than simply publishing FASA's computer games, how about if they just buy that part of FASA and make it an internal division of Microsoft? "We decided it was the best solution for us. It would allow us the resources to explore our universe, but also to create new universes as a small shop would do. For me personally, I've been like a kid in a candy shop. I've always had more ideas than we've had resources to explore and now there's pretty much unlimited resources."

Weisman, who is now the creative director for Microsoft's games group, estimates that the *BattleTech* Centers have enjoyed over 30 million in ticket sales and at least eight million sales of about a dozen different computer games. The *BattleTech* universe has produced about 300 game products, hundreds of miniature figures and toy lines, over 50 novels, and even some TV shows. It's been a long 20 years, but all in all, Weisman's $700 investment has paid off pretty well. ∎

A shot from the actual pod-based version of MechWarrior.

Big Fun

MICROSOFT' MECHWARRIOR 4: VENGEANCE

DELIVERS GRADE-A ACTION IN A B-MOVIE WRAPPER

by Robert Meyer

Any game series that warrants four new games, one significant modification, two add-on packs, and a host of repackaged special editions has to have something going for it. The *MechWarrior* line of combat games is unique in its longevity and consistency. *MechWarrior 4: Vengeance* continues the major themes of the lineage: simulator-style combat, scripted missions, spectacular graphics, and most of all, honkin' big robots.

The universe is fully as convoluted and filled with arcana as any fantasy milieu, and this game does an admirable job of reflecting this detail, though with some significant compromises that may well offend purists. The stars of this setting are the BattleMechs—multi-ton combat machines reminiscent of modern-day tanks... if tanks had legs, that is. Piloted by brave MechWarriors, these 'Mechs come in all shapes and sizes, from the relatively diminutive Osiris at 30 tons, to the monstrous Daishi and Atlas models, each weighing in at over three times that. Each 'Mech mounts a selection of beam, missile, and ballistic weapons, of varying ranges. Configuring 'Mechs is one of the great pleasures of the *BattleTech* world, and one of the most important things you have to do in *MechWarrior 4*.

A tall tale

The game tells the tale of young Ian Dresari of Kentares IV. The Dresaris are House Davion loyalists, and when the evil House Steiner forces evict them from their homeworld with extreme prejudice, our hero takes it upon himself to reclaim his birthright. Thus the revenge alluded to in the title—the single player game is the story of your struggle to reclaim Kentares and banish the murderous Steiner occupiers.

But really, who cares? Like nearly all of the *MechWarrior* games beyond the first, the story is completely disposable. It doesn't help that the video and in-engine cut scenes feature some of the worst acting—voice and otherwise—in the entire *BattleTech* game universe. There's no sense of drama, as you can't fail any missions. You replay them until you win, and only once in the entire game do you have any sort of choice to make. The payoff for your final victory is incredibly anticlimactic, and the cheesy way in which the last battle is staged is guaranteed to make you want to turn a gauss rifle on the designers, at least until you figure out the trick to winning. From that angle, *MechWarrior 4* is a mess.

Luckily, that angle doesn't mean that much. For every scripting flaw,

Poor Cougar. Great laser effects.

Great terrain is MechWarrior 4's biggest claim to fame.

every horrible snippet of dialogue, and every quirky control problem, there's one irrefutable compensation: exhilarating big 'Mech battles. Perhaps better than any other game in this series, FASA Interactive's effort has resulted in a truly convincing and satisfying BattleMech combat experience. From the superb terrain, with liberally scattered foliage, to the excellent 'Mech models, to the thrill of punching dual gauss rifles into the back of an enemy heavy 'Mech at close range, this game captures the essence of what the *BattleTech* game is all about. You'll find yourself groaning through the videos, cursing the control configurations, and screaming at your AI-controlled lancemates... and you won't care, because you'll be too wrapped up in figuring out what new weapon configuration will work best with your recently acquired Atlas. You'll ignore all the flaws because you can't wait to get on with the next mission, so you can see how that new Long Tom cannon works out. Flawed as it is, the game is that addictive.

Getting to know your Inner Sphere

MechWarrior 4 plays out over 26 missions, though you'll only play 25. The penultimate mission actually gives you a choice of tasks, and how you go into the final mission depends on which one you choose to accomplish. That's the only branching you get—the rest of the game is entirely linear. The game is broken down into seven operations, each consisting of from one to six missions and encompassing seven distinct environments. Early missions are easier both in terms of the opposition you face and where you face them. The first operation, for example, is on a moon, where heat is not a problem for your 'Mech; the second is on the tundra, where it's also quite cold. Eventually, as you get better at the game and acquire a stable of powerful 'Mechs, you have to cope with bigger and badder enemies and more stressful environments. The desert of the fourth operation makes heat management critical, and the urban environment of the sixth operation puts a premium on your close-range fighting skills.

Such progression is welcome, but the game still falls into the standard format of ramping up difficulty solely by adding more and more powerful enemies. By the middle of the game you've used your last medium 'Mech (you never really get to pilot a light 'Mech, unless you've screwed up royally), and the last third or so is entirely a brawl between the heaviest 'Mechs with the heaviest weapons. Tromping around in an Atlas has its charms, but there's also something to be said for the joys of using a 35-ton Cougar correctly. It would be wonderful if the designers of *MechWarrior 5* could work in some missions where speed and stealth were important, and where a lance of light or medium 'Mechs was the preferred tool for the job. In the *BattleTech* universe, after all, assault 'Mechs

Off we go, into the wild... green... yonder....

are rather rare.

Once you are in the mission, however, you'll likely forget any nagging doubts about the game's overall structure. The missions are well designed, and not nearly as puzzle-like as those in other iterations of the series. Usually, you have some discretion as to how you meet your goals, and the situations are nearly always interesting. You often have multiple objectives, and sometimes you have discretion in what order you accomplish them. Much of the fun for each mission, though, is in choosing the right equipment and 'Mech for the job. You'll probably have to play many of the missions more than once, but usually not more than three times, with the exception of the sometimes brutal final battle. This gives you a chance to experiment with different combinations of equipment, and that alone is quite entertaining.

Nuts, bolts, and scraped knuckles

The MechLab, where you mix and match chassis and weapons, is nicely done, with an easy to use click and drag interface and plentiful information. It is a bit simplified from *BattleTech* canon, as there's none of the intricate calculation of critical spaces that dominates the board game rules. This isn't a bad thing, because the resulting system prevents egregious abuse of the spirit of the rules while keeping things easy to use. You also get plenty of toys to play with, from the series-standard lasers, missiles, and autocannons to new gadgets like artillery beacons, Long Tom cannons, Thunderbolt missiles, and Bombast Lasers. Much of the fun you'll have comes from fiddling with your 'Mech configurations, trying to find the perfect combination of firepower, protection, and mobility. Expect to spend a lot of time in the MechLab.

As is too often the case in *MechWarrior* games, a lot of your choices just aren't viable. By the end of the game you'll have dozens of 'Mechs, but you'll only use five or six of them between you and your lancemates. That's because only the biggest and heaviest 'Mechs can hope to survive the last half dozen or so missions. Much of your arsenal of weapons, too, is useless, as many weapons are simply too inefficient, or too weak, to have roles in the last half of the game. This means that as soon as you get access to heavy gear, you use it exclusively for the rest of the game. Gauss rifles, heavy autocannon, and long-range particle projection cannons and large lasers are just about all you'll need for the last third of the campaign. Be careful what you give to your AI controlled buddies, though; they don't tend to be that smart, and use up ammo pretty quickly. Still, they're easily the smartest friendlies of any of the *MechWarrior* games, even if they do get hung up on buildings and walls too often.

If you want to play with human allies, you can do so, via the Internet, a direct dial-up connection, or a LAN. Zone play, over Microsoft's Internet Gaming Zone, is integrated into the game, and works well. Unfortunately, the multiplayer games are limited to the usual deathmatch and team capture the flag variants that characterize most first-person shooters. When will designers deliver both co-op play in single-player missions and multiplayer missions designed around tactical problems such as assaults, defenses, or recon missions? *BattleTech* is a full-fledged wargaming environment, so why not some "realistic" (well, you know... as "realistic" as giant robots get) multiplayer missions? Still, it's a blast to, er, blast your friends and strangers in any event.

Free Kentares!

When you strap on a 'Mech and go out to do battle, all these concerns fade away. You find yourself playing mission after mission, eager to find out what new 'Mech you might salvage or what new landscape you might see. You ignore all the bad stuff and live for the chance to pulverize the head of a Nova Cat with your dual gauss rifles, or the opportunity to sear off the arms of a Thor with concentrated PPC fire. You curse at the game for throwing an elite enemy at you when you're damaged and low on ammo, and cheer when you finally beat the S.O.B. in a one on one fight. Most of all, you have a hell of a good time kicking metallic butt all over Kentares IV. And that, after all, is what *BattleTech* is about. ∎

That Powerful Feeling

KENTARES ON SIXTY TONS OF MISSILES A DAY–

A GUIDE FOR MECHWARRIOR 4: VENGEANCE

By Jeff Vogel

MechWarrior 4: Vengeance is very good at making you feel powerful. If an annoying tank is poking at you with its puny little cannon, you can just step on it. If a building is getting in your way, a few seconds of firepower will reduce it to rubble. The very ground trembles between your feet.

Then a Steiner MadCat Mk II neatly shears your legs off with a quick gauss rifle barrage, and you suddenly don't feel so powerful after all.

The purpose of this guide is to help you make the journey from baffled scrub to semi-accomplished MechWarrior. Perhaps you're the sort of player who gladly goes into Instant Action in a ShadowCat against two Daishis and two Awesomes, pitting your gauss rifle against their PPCs and LRM 10s. If you understood that previous sentence, this guide probably won't help you much. You are already on the right track. If the battle tactic "Run right up to the enemy and mash all the buttons on your joystick until it's dead." is still a sadly recent memory for you, read on....

The basics: To kill A 'Mech

The heart and soul of *MechWarrior* 4 is killing enemy 'Mechs. That's your job, and it's not an easy one. Learing a few basic principles, however, will make your job much easier.

A 'Mech is split up into body parts (center torso, left torso, right torso, right arm, back, head, etc.). Each part has armor. When you shoot a body part and its armor is gone, you do internal damage. Some internal damage destroys weapons. Do enough internal damage and the 'Mech dies.

What this means is that the quickest way to kill an enemy is to focus as much damage as possible on a single area. If you do ten points of damage to each body part of a 'Mech, it won't even be breathing hard. Do all that damage to the torso, however, and the 'Mech is dead. Nothing is more frustrating than fighting a 'Mech that has lost all of its armor on all of its body locations but is still running around merrily shooting at you with all of its weapons. It should be dead, but it's not.

So what do you do about it? First, focus on weapons that do a lot of damage in a single punch. All other things being equal, one gun that does ten points of damage is worth more than two guns that do five points of damage. The bigger gun will do more damage to one spot. Similarly, weapons that tend to spread damage along several locations (such as a spray of Long Range Missiles) are sometimes less effective at scoring quick kills.

When you get a chance in combat—when an enemy is running at you from long range, for instance—focus your firepower on one spot on the torso. When a 'Mech has one spot that's sparking, aim for that spot, since it's already damaged. While shooting off an arm or leg does weaken a 'Mech's ability to move and fight, it doesn't bring it that much closer to actually being dead. In the long run, the torso is a better target.

Battle strategies

In a first-person shooter, circle strafing is the best tactic. Basically, you move sideways while turning, so that you circle the enemy while keeping it in your sights at all time. This is the gold standard of first-person shooter strategies. In *MechWarrior* 4 you can't walk sideways, so you have to adapt.

The best basic move to learn is circling while torso-twisted. Basically, you torso twist to one side so that you are looking at the enemy, move forward at a good speed, and turn so that you are circling your foe while constantly keeping it in your sights. It's the 'Mech equivalent of circle strafing, and the game tutorial gives you a good chance to practice this move. This way you can bombard your enemy and, at the same time, be

A nicely damaged foe. Aim for the areas with no armor.

See that headlight? Time to snipe a 'Mech!

Take that, FASA Interactive!

Repair bays look like this.

A very good weapon arrangement. All the key weapons are on the main trigger.

This mech has the default weapons. What a mess!

If you're in a hurry, just step on this tank.

See that tiny fuel truck? Shoot it when an enemy is standing by it.

in constant motion. It takes practice to get this maneuver down, but it's the best place to start.

Whether fighting the computer or humans, it's a very good idea to keep moving. It makes it much more difficult for an opponent to get a missile lock on you, and of course it's harder to hit you with direct weapons. Also, even if the enemy gets a lock-on and fires some LRMs as you, it is actually not that tough to dodge them if you're already moving quickly.

The distance from which to circle your foe depends on the weapons you are using. One of the strengths of large lasers, Particle Projection Cannons, and gauss rifles is that you can circle your enemy at three hundred meters or more and still shoot. Even on Elite difficulty level, your enemies will have a hard time hitting you if you circle them at a distance.

When playing single-player missions with lancemates, other tactical options are open to you. While your assistants distract your foes in dog-fights, you can stand a safe distinct away and snipe. You will often find that you are much better at focusing on specific and vulnerable target areas than your helpers are, and while their 'Mechs can be destroyed without ending the mission, yours can't. So feel free to stay a safe distance away from the brawl, zoom in your targeting reticule, and hammer away at enemy torsos with direct weapons. When an enemy zooms in on you, run away for a little bit, and, when it forgets you, start to snipe again. This tactic will be a great help in much of the single-player game.

Take advantage of long-range weapons. Always advance slowly, and, when an enemy comes into range, take the opportunity to snipe at it with a few shots and let it come to you. You can often heavily damage an enemy 'Mech before it gets you within range. Even better, you can fre-quently destroy turrets entirely before they can take a single shot at you.

Finally, forget about honor. Shooting people in the back is the way to go. If you see an enemy running somewhere, start to tail it, then shoot it in the back as rapidly as you can. Back armor is always weaker.

Always remember: being cowardly is bad. But it beats the heck out of being dead.
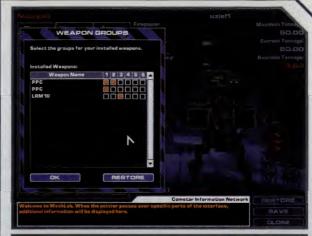
The MechLab: Your new best friend

The MechLab is the screen you can use to customize your 'Mech. You can change weapons, add ammo, and tinker with your armor and heat sinks. Sometimes it's easy to be lazy and not use it. After all, each 'Mech already comes with a mix of weapons and your controls are automatically config-ured to fire them. Just as you wouldn't play all the way through *Quake* using the shotgun, however, you shouldn't be content with what you're given. You can do much better.

MechWarrior 4 is based on FASA Corp.'s *BattleTech* boardgame, and to maintain faithfulness to the original source, all of the 'Mechs have the same weapons they had on paper (though damage values and other para-meters have been adjusted slightly). What works really well in a board game, however—where you have time to carefully think and plan each shot—doesn't necessarily work so well in the heat of combat. In a comput-er game, you have to scramble to steer and aim, and you may only have a split second to choose a weapon and fire.

Consider the Thor, one of the classic 'Mech designs. It has AC5 auto-cannons, medium lasers, an LRM 15, and a machine gun, plus jump jets. In the board game, this works great. In the PC game, however, you prob-ably won't be fighting at full efficiency. The default weapons groups have your weapons scattered among the fire buttons, making it difficult to fire different sorts of weapons simultaneously. Long-range missiles are almost worthless without a lock-on, which can be difficult to get. In a close range dogfight, when you get your target in your sights, your good weapons may be on different buttons, so you won't be able to hit the enemy with everything you have. The machine guns hardly do any dam-age at all. And if your play style doesn't involve jumping, jump jets are a lot of wasted weight.

So what should you do? First, remember your goal. You need to do a lot of damage to one location on each enemy 'Mech. That means that tiny

weapons (like machine guns, flamers, and the smaller pulse lasers) are suspect. So are combinations of weapons that hit the target at different times (such as autocannons combined with lasers). You might want to consider switching from a mix of different weapons to several of the same type of weapon.

Also, figure out which sort of weapon you like best. Most players have a preference for a specific sort of weapon, such as PPCs or LRMs. If there is a sort of weapon which goes along with your play style better than any other (and, given time, there probably will be), start replacing the weapons that annoy you with the ones you like. Avoid any 'Mech chassis that won't let you have your preferred weapon types. Give those 'Mechs to your lancemates.

Now suppose that you have the perfect weapons mix in mind, but it weighs just a little bit too much. There are ways to make a little bit more room. If you have jump jets but you find that you never jump, you can free up several tons by getting rid of them. You can free up tons by reducing your maximum speed, dropping heat sinks, or reducing your armor. These are extreme solutions, but the increase in firepower may be worth it.

Also, don't forget to give your guns and missile racks at least a ton of extra ammo. Nothing makes an extended mission more aggravating than having to conserve shots.

Of course, having all of these guns won't do you any good if you can't fire them when you want to....

Setting weapon groups

Most joystick controllers have three weapons triggers, each of which can be set to fire several of your 'Mech's weapons. Each 'Mech is configured with default weapon groups. Usually, the repeating weapons (such as pulse lasers) are set to the forefinger trigger, and the other weapons (large lasers, autocannons, LRMs, etc.) are set to the thumb triggers. Unfortunately, this isn't necessarily the best set-up for maximum carnage in the heat of combat.

When you get your target in your sights, you want to be able to pull a single, easy to reach trigger and launch all of your appropriate weapons simultaneously, so that they are all sure to hit the target in roughly the same spot. Also, it is best to put all of the best weapons on the button you have the easiest time reaching (usually the forefinger trigger).

Use the thumb triggers for other groups of weapons. If there's a special sort of weapon (such as an LRM, for the occasional long-range attack), assign it to a button of its own. Also, if all of your weapons are attached to the main trigger, assign just a few weak weapons to a different trigger for shooting small things (like tanks or choppers).

In general, it's a solid and simple principle. Figure out what your core, preferred weapons are. Put a lot of them on your 'Mech, with a good ammo supply. Then put all of them on the trigger you are most comfortable with. This will put you in a good position to do some serious damage.

Using your controls

If you don't have a joystick, this might be a good time to get one. Unfortunately, while many action games are best played with the mouse and keyboard, controlling a 'Mech is much more complicated. You have to choose from a variety of different speeds, torso twist, and do any turning and aiming that might be required.

If you're determined to use a keyboard, however, there is hope. First, be sure to set the mouse to control the torso. This will make it much, much easier to aim. Second, change your weapons groups so that the mouse button fires all of your key weapons. You will probably have enough trouble hitting all of the correct keys on the keyboard without having to lurch for the Help and Home keys as well.

Finally, you will need to rely on your lancemates a lot, since it's can be

The handy, easy-to-use lancemate command menu.

Zooming in is extremely handy.

A ShadowCat rebuilt to maximize its damage.

You'll get a free shot on this ShadowCat when it comes out from behind the hill.

difficult to maneuver nimbly in a dogfight using the keyboard. Try to control your lancemates carefully and support them using sniper tactics.

Using your lancemates

In the single-player campaign, lancemates are a necessary tool for your survival. Unless you are extremely skilled, you won't be able to handle everything by yourself. Lancemates provide an excellent buffer between you and your foe. After all (at the risk of sounding callous), if a lancemate gets blown up, you merely are unable to use him or her for a little while. If you get blown up, game over.

Another great thing about lancemates is that they're pretty good in a fight. If you're not the best warrior in the world, they can take up the slack. First you have to learn how to control them, however.

While they can operate without any orders from you, this tends to be an exercise in frustration. You will find that they tend to fall well behind you when you are running somewhere, and they will tend to fire at different enemies, instead of concentrating their fire on one foe.

To give an order to all of your lancemates at once, hit F4. You can then make sure that they all follow you by hitting F3. A better way to control them, however, is to target a strong enemy. Hit F4 (for select all), and hit F1 (for attack target) and they will all move quickly towards your designated target. By getting them all to focus their fire on one foe, you reduce the amount of firepower that the enemy can direct at you more efficiently.

Also keep in mind that lancemates aren't necessarily as good as you are at concentrating fire on one damaged spot. Try sniping. Let the lancemates take the brunt of the action while you stay safely back and fire carefully targeted shots at vulnerable enemies.

Choose your weapon

There are three different classes of weapons, essentially. Each has its plusses and minuses, but, before long, you'll probably find you prefer one over the others.

The first class of weapons is missiles. There are long, medium, and short-range missiles. To hit something with a long-range missile, you probably need to get a lock-on. You get a lock-on by keeping the targeting reticule on your target for several seconds, which can be extremely difficult (especially if they are moving, or if you are moving, or if both of you are moving). To hit something with a short or medium range missile, you aim in the correct direction, press the trigger, and hope.

While missiles do solid damage and generate little heat, they are very difficult to use effectively. Unless you can get a lock-on, they are difficult to aim. Even if you do hit, the spray of missiles will probably strike your enemy in multiple locations, minimizing their impact. You will run out of ammo quickly, and even if you do fire an LRM with a lock-on, a hit is far from guaranteed.

If you really like missiles, STRK missiles work like SRMs but they automatically get lock-ons. This makes them much easier to use, but you would probably still be better off with autocannons.

The second class of weapons is projectile—autocannons and gauss rifles. These weapons do solid damage, generate minimal heat, do all of their damage in one location, and are easy to aim.

Their first drawback is obvious. They use ammo, so you can't fire indiscriminately. Adding a mere one or two more tons of extra ammo in the MechLab will give you enough bang to last through even a long mission, however. Also, you can get more ammo from field bases and 'Mech Repair Bays.

The second problem is the need to lead the target. Autocannon shots take time to reach the target, which makes these weapons less effective against targets at long range. Gauss rifles shots, on the other hand, reach the target instantly, which makes them extremely effective. The combination of heavy punch in one location and easy aim makes all varieties of gauss rifle excellent choices in battle.

The final class of weapons is beam—lasers and PPCs. These are extremely powerful weapons. They are common in salvage, they do excellent damage, they don't require ammunition, and the ray they fire is instant or nearly instant, so they are easy to aim. The NovaCat is one of the most popular 'Mechs for dedicated MechWarriors because of its capability to bear a wide variety of beam weapons. Give it two large lasers and two PPCs or as many medium lasers as it can carry and boost its heat sinks and you have a 'Mech that can carry you to the end of the game.

Beam weapons have one serious drawback: heat. Were it not for the warmth these weapons generate, beam weapons would easily beat everything else for power and versatility. Don't be afraid to shed weapons and speed and fill the open space with extra heat sinks. If using a beam-heavy 'Mech, the most important goal is to make sure you can fire your weapons as fast as you can for several volleys before you are forced to let them to cool off.

Finally, be sure to experiment with pulse lasers. They can fire a lot of shots in a short time, so they're much easier to aim. On the down side, it can be difficult to focus the damage on a wounded location, so they may be more difficult to use in the long run. ∎

Aim for the areas that are black or sparking to kill an enemy quickly.

See how all of the enemy ShadowCat's locations are red? That means you've damaged it very inefficiently. Stupid pulse lasers.

1200 Tons of Hell

BATTLETECH STRATEGY GETS REAL WITH MECHCOMMANDER 2
By Robert Mayer

Have 'Mech, will travel: it's the calling card of the year 3063's version of the hired gun. Only this time, you're the one calling the shots–you and your company of hardened MechWarriors, making a living on the Chaos Marches, hiring out to the highest bidder. Everybody has 'Mechs; it's what you do with them that matters. That's where you come in. You're the MechCommander.

The original *MechCommander* was a very mixed bag. Dubbed a real-time strategy game, it had more in common with tactical simulations than with *Command & Conquer*-style titles. It also had more in common with puzzle games and migraine-inducing frustration than many gamers wanted. Equal parts exhilaration and exasperation, the first attempt at a full-bore *BattleTech* strategy game for the PC ultimately failed to deliver on its promise that "you'll know what it's like to command." Instead, you too often knew what it was like to beat your head against a wall.

FASA Interactive, the developers of the original title, realized the limitations of what they had crafted. "[We were] taken behind the shed and given a shellacking," said Denny Thorley in an interview conducted after the first game's release, referring to the game's lack of in-mission saves, puzzle-like missions, and a map that you had to reveal step by step, despite having been dropped into battle from orbit.

"We got our asses kicked on that," agrees Mitch Gitelman, program manager of *MechCommander 2*. "The game was too hard. The hint book even said, 'your game is really hard!'" Every once in a while, though, the game was magical; you actually did feel like you were in charge of a group of hotshot 'Mech pilots, kicking Clan butt and making the worlds

safe for, um, galactic aristocrats.

It's those magical moments that the team of *MechCommander 2* is trying to recover and enhance with the sequel. Gitelman, FASA Interactive, and a Microsoft team are working on fixing all the problems of the original game and adding a dropship full of improvements. Their goal is to craft a BattleTech strategy game that will satisfy hard-core fans and casual players alike, while staying true to FASA Corp's rich game universe. It's a difficult task, but the team seems up to it. "This is the game we wanted to do last time," promises Gitelman. "What we're giving you now, and one of the biggest features of *MechCommander 2*, is recoverability," the ability to recover from bad choices, bad luck, or bad encounters.
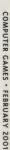
The Chaos Marches

Bad luck and nasty encounters will probably be plentiful given the game's settings. The game takes place in the year 3063, after the Clan invasions. The location is the Chaos Marches of the Inner Sphere and the game puts you in the role of a mercenary commander bouncing between three factions: House Davion, House Steiner, and House Liao. The team doesn't want to give away too much yet, but you can count on intrigue, betrayal, death and even a touch of romance. Like the original, *MechCommander 2* gives you real-time command of a group of BattleMechs and their pilots. This time you can command up to twelve 'Mechs with their MechWarriors, sixteen if your salvage operations get lucky. Controls are similar to those in most real-time strategy games, but what you do with them is rather different.

"When I think of real-time-strategy, I think of micromanaging my little city and trying to find berries somewhere," Gitelman says, and you definitely won't be doing any of that here. "*MechCommander 2* is about

This assault 'Mech gives you a good sense of the scale of things in the game. "Big" isn't the half of it.

This complex firefight shows off some of the variety of units in the game.

The badlands maps are barren, but deadly.

These 'Mechs are not holding a sewing bee.

Incoming!

putting the right man in the right 'Mech for the right mission." He goes on to say the game is more about examining the enemy's base, sending in an elite scout to find out how he's deployed his forces, and then executing a plan that leaves his rear-end sensitive for days. "You want me to sum that up in a genre title? Around here, we call it 'real-time-tactical'."

As you'd expect from a game where you only control a handful of units, each one is extremely detailed. BattleMech's, for the uninitiated, are large, heavily armed and armored bipedal military vehicles; their pilots are called MechWarriors. They're the stars of FASA Corps' *BattleTech* universe, which itself has been the inspiration for numerous role-playing, board, miniatures, and computer games of various flavors. In *MechCommander 2*, you can configure each 'Mech with an assortment of weapons and armor, and assign them to pilots of differing and with luck complimentary abilities. As commander, it's your job to assess each mission, come up with a plan, and carry it out successfully.

You can't win by merely lassoing your units and right clicking on a target. With no real resource gathering or building, you only have a small force and limited supplies. Depending on its configuration, each 'Mech will be strongest in short, medium, or long-range combat, and while your pilots will do their best (with the help of the AI), it'll be up to you to make the best use of your assets, human and mechanical. "One of the things that sets *MechCommander 2* apart

from other games is that your units are a combination of a MechWarrior and his BattleMech," Gitelman asserts. There's a real role-playing element in the game, and to win you'll have to pay attention to personalities as well as firepower.

Seeing is believing

Intense, humorous, self-deprecating (he gleefully shows visitors earlier games he's worked on, and describes them as horrible), Gitelman's job is to make this vision a reality. As a start, the team is trying to rectify the faults of the original *MechCommander*. "In-mission save is one of the first features we agreed upon," he says laughing. A father of three, he says he'd never finish a game without being able to stop and attend to domestic crises.

This is good news for frustrated fans of the original, where technical issues derailed in-mission saves much to the team's chagrin. It also bodes well in that to be challenging, missions will likely have to involve more tactics than puzzle solving, if you can save at will. "One of our big goals," he promises, "is not to frustrate our players."

Also encouraging is Gitelman's promise that the infamous black shrouded maps of *MechCommander* are gone for good. "I can't tell you

Under a steel-gray sky, the MechWarrior stands guard.

how liberating this feels," he confesses. "We've never been fans of scouring a map to find a way across a river. The game is about knowing where the bridge is and trying to figure out how the enemy is defending it."

That doesn't mean you'll be able to see everything that's out there, though. You'll have to do some careful reconnaissance work if you want to succeed. "We are using line-of-sight along with our sensor system," Gitelman says. "Some of the 'Mechs, mostly light scouts, are equipped with sensors that warn them of threats before entering line of sight." In game terms, this means you'll see icons representing enemy contacts on the map, icons that reveal more information as your pilots get more skilled in sensor use. According to Gitelman, "MechWarriors specializing in sensors can differentiate 'Mechs and vehicles, giving you an edge." At higher levels of skill, your hottest 'Mech jockeys will be able to tell you the make and model of an enemy 'Mech before you ever see it.

In addition to in-mission saves and more realistic line of sight rules, MechCommander 2 will allow you to issue orders while paused, giving more contemplative commanders a chance to think things through before

Mad Cat disease!

wading into battle. You'll want to think before you act, too, because you'll want to insure that your MechWarriors live long and destructive lives.

Gitelman even goes so far as to describe his game as partly a role-playing adventure. "One of the things that sets *MechCommander 2* apart from other games is that your units are a combination of a MechWarrior and his BattleMech." He wants you to identify with the men and women who are putting their simulated lives on the line for you.
"*MechCommander* players really got attached to their MechWarriors. Hell, we got attached to them and there was really very little that defined them. This time around, we want to focus on the MechWarriors even more." The game will sport multiple levels of difficulty as well, to accommodate different styles of MechCommanders.

A boy and his 'Mech

As part of this role-playing focus, each MechWarrior will have more and more useful skills. "Each starts with a gunnery and piloting skill. But now, every time a pilot is promoted, from Green to Regular to Veteran to Elite to Ace, you get to assign him a special skill," Gitelman notes. "The difference between a rookie and an Ace is four specialty skills. That means you can train up a team that really compliments each other." His preferences? "I usually go in with a master scout who's good with sensors and can push his jump jets farther, a long-range stud in a Catapult or similar missile boat, and a medium 'Mech specialist who's deadly with PPCs."

The game will also feature videos and voices unique to each pilot, and will track statistics like missions, kills, and medals for your MechWarriors. The hope is that you'll grow attached to your team, and become more immersed in the game. One thing Gitelman wants you to feel is the sheer excitement of being a MechCommander, and to that end he hopes to tap into the thrill of *BattleTech* on a fairly primal level.

"A lot of people think *BattleTech* is about micro-management," he muses. "We think it's about cool MechWarriors piloting enormous BattleMechs in politically-motivated, action-packed military missions. It's about being transported to a different place, where honor actually means something and individuals can make a difference." A high-tech fantasy, if you will, with 'Mechs instead of dragons and MechWarriors instead of knights. Gitelman doesn't dismiss gamers who like detail, it's just that he recognizes the other side of the coin. "For some, the micro-detail adds to the suspension of disbelief. For others, micro-detail is distracting from the fun of commanding an entire company of 'Mechs and making everything in their path disappear in a cloud of debris."

Helping immerse you in the game is the plot, which this time has you in charge of a company of mercenaries. As a hired gun, you receive assignments from your employer; when your employer changes his or her mind,

Red and Blue teams duke it out in the desert.

your missions change as well. Gitelman wants you to feel like you have a stake in what's going on.

"We want players to feel a part of that universe and to see more aspects of it than in previous 'Mech games. MechCommanders have more access to events that are off the battlefield and beyond an individual MechWarrior's sphere of influence." Adding to this sense of involvement is the knowledge that what goes on in *MechCommander 2* will actually change official *BattleTech* canon. FASA Corp. is working with FASA Interactive and Microsoft to coordinate things, so what happens in the game will end up describing changes in the Inner Sphere that will persist as part of the game universe long after you've uninstalled the game and moved on to different things.

Another area where the team is hoping to craft an enticing experience is the design of the 'Mechs themselves. "Basically, 'Mechs in the first game were sprites, with a speed value, a load value...and that's it," Gitelman laments. In *MechCommander 2*, there is a lot more to each war machine. The game, Gitelman says, emphasizes combined arms, where every 'Mech has its own role. Each unit will be defined by its weaponry, a speed value, an armor value and a heat value that determines which weapons it can use. The game also discourages "boating," or adding scads of energy weapons to a 'Mech. This was a tactic that the original game encouraged because heat buildup (a central part of the BattleTech game mechanic) wasn't factored in. Only some 'Mechs will be able to mount sensors, usually light units. Some of House Liao's heavier machines, though, will be able to carry sensors too; it's this sort of differentiation between factions and units that Gitelman hopes will add to the immersiveness of the game.

This base is in serious trouble.

Dialing for dropships

On the battlefield, subtleties of story take a back seat to death and destruction, and *MechCommander 2* abounds in ways for commanders to impose their will on the enemy. One of the team's favorite things about the game is the new support palette, a menu of seven units or services you can access during a game to help with a mission. The support palette offers sensor probes, air strikes, artillery, a repair truck, mine layers, a scout helicopter, and a salvage craft for commanders who have the resource points to pay for them. "It gives [players] a ton of flexibility to play to their strengths and weaknesses as a commander," explains Gitelman. The whole idea is to emphasize combined arms, where every 'Mech has its place, an idea Gitelman ascribes to lead designer Mike Lee.

Resource points are something new for the game, and they represent payments from your employer, and payoffs for targets of opportunity captured during missions. Each option on the support palette costs a set amount of RPs, so there's a built-in tension between economy and effectiveness. Cheap options like sensor probes will merely update and enhance your intelligence about the enemy, while the more expensive artillery mission will result in the delivery of an on-map artillery unit which you can use to plaster your foes. The most expensive option, the salvage craft, is also the most useful. Unlike the original, you can conduct salvage operations during a mission as well as after it. Knock out a particularly effective enemy 'Mech, and fly in a salvage craft to claim it as your own.

Gitelman likes all of the support options, but especially this last one. "The best thing," he avows, "is getting the high ground, shearing off an Atlas' head and then salvaging it with all of its weapons still intact. Stomping my enemy with his own 'Mech is pretty damn cool."

Being able to call in repair trucks or minelayers while on a mission should add some much needed flexibility; in the original, it was usually impossible to recover from a wrong pick during force setup. In-mission salvage could be even more significant, as it's the only way to command more than twelve 'Mechs at a time. The new support options should also make the game more dynamic, as presumably the designers will have to craft missions that will stand up to a variety of different tactical approaches.

Gitelman promises that the computer opponent will compel more tactical acumen as well, and that friendly AI will do more for the cause. The AI in the first game was, as Gitelman says, pretty straightforward, and he says the pilots will be much smarter in *MechCommander 2*, and they know what their weapons can do, and how they do it. "Trust your troops," he

advises, "they're the experts. You point out the targets, and they'll execute your orders." The goal is for you to be a tactician, not a puzzle solver. "There's not a lot of play my way or die" in the game."

You won't have full control of things, of course. The twenty-plus missions in the campaign are scripted, but you'll have a chance to pick and choose what you do next at certain points. "After playing one or more "story" missions," Gitelman notes, players will be offered two to four optional missions that can be attempted in any order. "You might want to raid a weapons depot before attempting a base defense mission, etc." As always, the goal is to balance storytelling with gameplay. "The BattleTech universe has been around a long time there are a ton of great stories in the sourcebooks and novels. We want players to feel a part of that universe and to see more aspects of it than in previous 'Mech games," he asserts.

The more the merrier

Another area where the *MechCommander 2* team will try to deliver an enhanced experience is in multiplayer matches, due in part to rule changes. "The line-of-sight and sensor system makes it feel a little like a submarine movie," Gitelman says, with more hunting and attention to stealth. He thinks the ability to call in minelayers, artillery pieces, scout copters, airstrikes, sensor probes, and especially salvage craft makes each experience unique and allows players to experiment with new tactics. "I think we'll find commanders creating strategies the team has never considered."

Hosts will be able to lock out features they don't want, so if you want a light-'Mech only game, you can have it. The game will support up to eight teams, so theoretically you could have eight players going at it tooth and laser in a full-fledged deathmatch. Each player will be able to choose from the three factions in the game (Liao, Steiner, or Davion), and players can ally among themselves. The game will be on Microsoft's Zone service, of course, and Gitelman spends a fair amount of time surfing the 'Net for suggestions on multiplayer features. "I go up to the web all the time to see what they want and what we can fix about multiplayer."

One thing you won't see in multiplayer or single-player games is melee combat. In the *BattleTech* universe, 'Mechs often bash each other into submission, and there are even 'Mechs like the Axeman which are specifically designed for mixing it up in melee. According to Gitelman, though, lag is the culprit. "You'd be getting hit by a guy who was all the way across the screen," he says, because of the difficulty of synchronizing all of the players and all of the game data over the Internet. And as for cooperative missions, Gitelman isn't promising anything. He hopes you'll be able to take on missions with human allies against the computer, but it remains to be seen whether such a feature will be in the finished game.

Note the detail on the 'Mechs; it's exquisite.

A TRANQUIL
ALASKAN NIGHT.
SO QUIET,
YOU CAN BARELY HEAR
A NECK SNAP.

TACTICAL ESPIONAGE ACTION
METAL GEAR
SOLID

NOW ON PC.

YOU'RE A RETIRED SPECIAL FORCES AGENT SINGLE-HANDEDLY TAKING ON AN ARMY OF TERRORISTS. THE AWARD-WINNING CONSOLE GAME COMES TO LIFE ON THE PC WITH IMPROVED GRAPHICS AND OPTIONAL FIRST-PERSON PLAY MODE. PLUS, IT NOW INCLUDES OVER 300 VIRTUAL REALITY TRAINING MISSIONS TO HONE YOUR SKILLS AS SNAKE, OR EVEN PLAY AS THE NINJA.

INCLUDES VR MISSIONS

A fairly complex base. The detail rivals that of a good model railroad set.

Visions of Jehenna

In a lot of ways, the *MechCommander 2* team hopes the game will be everything they wanted the original to be, and that includes the enhanced graphics. While the original game delivered pretty impressive visuals, there were a lot of compromises; after all, the minimum system requirement was a 133MHz Pentium. With a release date of summer 2001, the team can shoot for a rather higher level of hardware requirements, though they're not ready to say just what you'll need to run their baby. Gitelman promises you'll still be able to run the game in software mode, though, as he doesn't want to exclude anyone who doesn't yet have a 3D card, particularly overseas gamers.

Running *MechCommander 2* without Direct3D support, though, would seem to be a waste of the talents of people like art lead Leigh Kellogg and artists Steve Scott and Charles Oines, as even fairly early in its development the game looks fabulous. One of the things that's immediately apparent is the attention the team is paying to scales within the game. Unlike *MechCommander*, where every 'Mech was exactly the same height in pixels, each unit is scaled properly to the other units and structures. An Atlas, a 100-ton assault 'Mech, now towers over a 30 ton Cougar, as it should. Mech's move more realistically as well; the team is developing their animations with input from the *MechWarrior 4* team in the same building. The result should be units that move like they should, or at least, more like they do in the action game that many *MechCommander 2* players may have played. A fictional benchmark is as good as any other, you have to think; after all, no one's actually ever seen what a Mad Cat looks like ambling about, have they?

At its heart, the game is 3D, both in terms of how the game processes terrain data and how it displays it. The original *MechCommander* used 3D terrain data internally, but represented maps and units in two dimensions. The current game offers full 3D for both units and terrain, and the result is spectacular. Attacking from a higher elevation gives you a tactical advantage, and you can even shear off the heads of 'Mechs, thus saving their valuable weapons and components for salvage. Trees are better this time around as well; you no longer have to burn through forests to make a path. Instead, you can tromp through the woods, knocking down endangered redwoods as you go, albeit at a slower pace.

In addition to the usual generic terrain features, you'll occasionally get to strut your stuff through a few special areas used only once or twice in the entire game. While the team doesn't want to let the details out of the bag yet, the terrain sets senior artist Greg Onychuk demonstrated were certainly impressive. Likewise, the detailed incidental units in the game, the fuel trucks, the control towers, and the like, resemble a highly detailed model railroad set. The effect overall is of a living, dynamic world, one that should be all the more fun to destroy in battle. The gameworld in general looks like a smaller scale version of a 'Mech simulation, which you have to suppose is the intent. Lead artist Kellogg half-jokingly asserts, "if art overshadows the story, that's no problem for me," and he has reason to speculate; the game looks that good.

It's a 'Mech, 'Mech, 'Mech, 'Mech world

MechCommander 2 is due to stomp onto store shelves in June 2001. By then, we'll have a much clearer view of how this attempt at an accessible yet faithful *BattleTech* strategy game has panned out. If everything goes as planned, and the team delivers not only the game they envision, but the promised full-featured map, mission, and campaign editor ("we can't 'dumb it down' for a wide audience." Gitelman avows), 'Mech fans should have their hands full proving they have what it takes to lead twelve hundred tons of ferro-fibrous armor, weapons, and electronics into mortal combat on the Chaos Marches. And maybe this time, instead of what Gitelman calls a "'MechClicker," you'll really be a MechCommander. ∎

Genre Real-time Strategy • Publisher Microsoft Release Date Summer 2000

The Badlands, and the 'Mechs who love them.

Cossacks
- European Wars

A New Era Has Begun...

European Wars: Cossacks is a historical real-time strategy based on events during the XVI-XVIII centuries in Europe when nations and states were created and demolished, gold was turned into numerous armies, and never ending wars shed oceans of blood.

Features:

- Huge battles up to 8000 units
- 16 rivaling nations with their own distinct graphics, economics and technical development
- More than 85 real historical large-scale wars and battles of XVI-XVIII centuries
- A huge technological hierarchy of more than 300 upgrades
- Unlimited variety of tactical and strategic methods of land or sea war against enemies
- Full 3D landscape with real world physics

" AUTHENTIC AND VISUALLY CAPTIVATING..."
-GAMESPOT-

★★★★☆

" 4 OUT OF 5 STARS!"
-ZD NET-

EUROPEAN WARS

Cossacks

Coming Soon...

They wuz red and green and orange and bloo and perple. They wuz flying threw the atmusfere one day, when low and beehold, there space ship fizzled, and they fell to Erth in a clowd of dust. Although they were true devotees of Hookt On Fonix, it didn't reely help. Oh, they wuz aliens all rite, with a reel space ship, fraught with hi-teknologie. But that didn't matter much—the few minutes it shood have took to fix the ship turned into several years, and they getted stuk in a weird howse all that time. They hanged around just long enough for Bad People to notice them. And why? Cuz they wuz stoopid.

THE DWEEBS THAT FELL TO EARTH

Tune in your sonar to the arrival of *Stupid Invaders*

By Cindy Yans

So much for Santa.

AFTER THE NOT-TOO-SUCCESSFUL RELEASE OF THE GAME *DOWN IN THE DUMPS* IN 1995, GAUMONT Multimedia created a little animated television show known as *Space Goofs* (*Les Zinzins de l'Espace*). Rather short-lived, it debuted in 1997 and was shown on Saturday mornings on Fox in the U.S. and Gaumont in France. Gaumont then formed Xilam Entertainment, which focused on recreating the series characters for a PC and console game. UbiSoft will publish the game, now called *Stupid Invaders*, and so far, it looks like one of the most promising adventure titles to rise from the dearth in a very long time.

Once upon a time

To present the story with a bit more eloquence, five colorful aliens of limited intelligence were on their way to somewhere when, unfortunately, their flux capacitor lost power (or something like that). They crash landed on our planet, and believed that they would be able to fix the problem in no time. Several years later, they were still here. They did have sense enough to hide out in an abandoned house, but it seems that an evil scientist, Dr. Sakarine, got wind of their existence. He is headquartered in Area 52 and coincidentally collects space aliens for biological experiments. (Doesn't everyone?) He gathers together several million dollars in a suitcase and summons his henchman Bolok. Whipping out a cleaver, he hacks the suitcase in half, offering half to Bolok and promising him the other half upon delivery of the aliens and their ship. Bolok hunts the hapless critters down, and produces a gun that

Bud can't quite see what's stuck in the chimney

turns them all into a block of ice—all but one, that is.

The five aliens are bizarre, whimsical, and fabulous. Stereo, Gorgeous, Etno, Candy, and Bud are red, blue, purple, green and orange, respectively. This would make Stereo the beast with twin bell-shaped heads, each of which resembles The Roadrunner with a pig's nose. Gorgeous is a simian-looking creature with an immense lower jaw and an overgrown but sawed down lower bicuspid. Etno appears to be a grumpy purple sausage in clown makeup. Candy is a shriveled version of the traditional "little green man" style

of alien, with a reticulated skull that's bigger than his whole body. The character you initially control, Bud, is a tall and goofy looking orange insectoid-like, butt-scratching specimen, deeply in need of a hairdresser, chiropractor, and orthodontist. And since we're describing people, Bolok (and the UK writers have been having a lot of fun with that name) is a tall, dark, sinister looking thug with a violin case and a very unsettling chin; and finally, Dr. Sakarine is a mummified Truman Capote clone.

When Bolok ices the little clan, Bud has the good fortune of being in the bathroom—and this is where the interactive portion of the game begins.

Beyond absurd

The absurdity and rather sophomoric nature of the bathroom being the first puzzle-solving place foreshadows the oddity and rather low-brow humor of the rest of the game. Actually, at least early in the game, bathrooms, sinks and tubs seem to be everywhere. Bud can use, flush, and plunge the toilet (in any order!) although he needs to do none of these things for any reason other than unmitigated pleasure. Escaping from the bathroom is your first challenge, and it will not be spoiling the game to tell you that you will need to fashion a makeshift grappling instrument out of a plunger and toilet tissue—not the soft-on-

A pin-up girl from back home.

Someone needs a course in interior design.

the-cheeks, scented variety, but the industrial variety for military use (both of which are available in the bathroom).

Climbing the toilet tissue brings you to a rooftop and chimney from which a pathetic whining emanates. "Help me, little chil-dren…" it pleads. Bud observes, "Wow, sounds like some monkey with diarrhea stuck in the chimney." But alas, no. It is instead Santa upon whom you pour poisonous drain cleaner that melts him into a pile-of-goo-with-eyes that slides down the chimney and across the hearth. Okay, enough spoilers. That was simply to give you an idea of the flavor of the game—broad slapstick tinged with bathroom humor.

The best part about an adventure game with this premise is that the farther left of reality you fly, the easier it is to justify zany puzzles. For instance, it seems quite within the realm of possibility that an intellectually challenged alien might try to attach a plunger to a roll of toilet paper, whereas for someone like Tex Murphy to do so would be ludicrous.

The state of the art
Even in its beta state, the game is graphically brilliant. 3D characters on brightly rendered backgrounds with seamless FMV—all of these integrate beautifully for a real visual treat. The environments will probably bring to mind a number of things as you click to navigate through them.

Stereo can't decide whether or not to agree with himself.

You'd have to agree that it seems to be a blend of *Day of the Tentacle*, *Toonstruck* (as ill-fated as that was, it was absolutely gorgeous), *The Neverhood* and *Grim Fandango*. Although it's not quite as slick as a LucasArts game (yet), it has a lot of potential. The artwork boasts crisp edges and highly saturated colors, and the attention to detail in the way of wall hangings, furniture, and "stuff" is meticulous. This is not one of those games in which every hot spot is essential. Often you can look at things or manipulate them just because. One sight gag, for instance, has Bud open a seemingly innocuous cupboard. A giant blue teddy bear is inside, grinning with a wicked gleam in its

eye. It then produces a sledgehammer and proceeds to bonk our hero's head flat. Then it goes away, unless you masochistically open the cupboard again.

The game is a total parody of those cheesy 1950s sci-fi flicks where aliens are terrorizing the planet. The opening music has that hushed, Very Serious, but weirdly atonal sci-fi feel, so it is initially apparent what they're going for. Music changes from area to area and is very evocative and well chosen. While there are some 2000 lines of spoken dialogue, it is still not a very wordy script (note that *Grim Fandango* had in excess of 5000 lines). Some of the voice actors have had some pretty high profile experience such as work in shows such as *Ren and Stimpy* and *The Simpsons*, and Xilam assures us that the dialogue will have been written in English rather than in French and then translated. Humor is very difficult to achieve at *all*, much less in translation.

Mechanics
A point and click interface makes navigation a breeze. A hand icon changes spontaneously from a pointing finger, to a "talking-animation" hand, to a manipulation hand, to a grasping hand, to a hand holding an eyeball, depending upon whether you want to go to, speak to, use, grab, or look at the cheese. You access inventory via the space bar, and you can click and drag items to combine them. Each location has various nodes and some of the locomotion is pre-pathed.

One of the design choices that seems a bit unfortunate at this time, and that will probably

A course in reanimation.

Hey, it wasn't supposed to work.

remain intact in the final game is the "You're Gonna Die There" situation. There are various times when you have no idea that to do such and such will absolutely cause you to die. These are no-escape situations, and are not often found in adventure games. When you're caught in one, you're caught, and you have no choice but to restore and then *not do that again*. Most designers solve this by allowing a moment for the player to sense danger, and allowing him a choice that will allow him to avoid or escape the potential death.

For eye-and-ear-candy deluxe, though, adventure gamers who don't care how *stoopid* a game can get should look out for this title. There's not much out there in the way of good adventures, and although we won't see the game until 2001, it will be wonderful if it can join *The Longest Journey* and *Escape from Monkey Island* to prove that the future of the genre does stand a fighting chance. ■

THE GOODS
GENRE Adventure

DEVELOPER Ubi Soft

RELEASE DATE First Quarter, 2001

Gathering of Eccentric Wizards

Nearly two years after the release of *X-COM* creator Mythos Games' *Magic and Mayhem*, there still isn't anything quite like it on the market. Its unique recipe of spells and monsters was both innovative and entertaining. *Magic and Mayhem 2: The Art of Magic* is currently in a very early state, and based on playing an early playable version of the game, it appears the original game's foundation is intact, and there are a variety of changes and enhancements.

By David Ryan Hunt

The X-COM folks' handoff of *Magic and Mayhem 2: The Art of Magic*

[top to bottom] **Several mountain giants get caught in the Tornado spell.**

Man, that one is ugly...

Demonstrating the chaos spell Apocalypse.

For those who haven't played the original title, the basic gameplay formula is relatively simple. Each player has a pool of mana, and he must capture and control Places of Power (PoPs) in order to regenerate mana. PoPs are like bases, except they have no inherit defenses. Controlling them confers a tactical advantage to the owner. Whether played single- or multiplayer, the game revolves around the PoPs. Players who only control one or two will have difficulty summoning creatures and using spells, while you have a near limitless supply of mana once you get enough of them. With that mana there are four divisions of spells to cast: summons, enchants, attacks, and other.

Summoning and controlling monsters is the bulk of the gameplay, as you need them to guard PoPs and fight battles for you. Numerous monsters await—everything from lowly skeletons and goblins to mighty dragons and storm giants. Choosing the right monsters to use is one of the many requirements for success. You can always leave a faerie or eagle to guard a PoP, but then you are guaranteed to lose the fight if anyone comes by. Dropping powerful creatures means you have to waste precious mana.

Enchantments are obviously spells that improve the capabilities of your units in one way or another. These include the common assortment of speed boosts and a few unique spells, such as Excalibur (also in the first game). Creatures enhanced with the Excalibur spell have a magical sword and gauntlet constantly floating over them, and it will attack anything within range (whether in front or behind). Excalibur does not have a limited duration, instead it lasts until the unit dies. Invisibility is a great spell to protect your hero, especially since you can still cast spells. Not all enchants are for your army, though—a handful of them are detrimental spells to cast

on your enemies.

Attack spells are basic damaging spells that target single creatures or an area, but using them properly is not so simple One of the most enjoyable parts of the first game was the major spell battles that ensued between two powerful mages. Even the sturdiest creatures can't last long in the midst of a host of powerful spells.

Other spells are useful tools that don't quite fit into the three specific categories. Teleport and Heal were the most important of these available in the pre-beta. It seems that Heal has been toned down in strength, so it is no longer possible to keep yourself alive by healing when you're standing in a meteor storm.

Old goodies, new style

Except for spells, *Magic and Mayhem 2* features controls similar to standard real-time strategy games, though the existence of spells makes it actually play slightly differently. Beyond deciding whether to use strong or cheap units, you have to evaluate when it's best to use different types of spells. Furthermore, there is an emphasis on role-playing, with various items, towns, and non-player characters strewn about. The story is delivered within the missions through scripted events instead of outside the normal game. You play Aurax, a fledgling magician who's in search of his sister. That's about all you know at the beginning of the game. Rather than starting with a complex plot, it develops through the journeys you undertake on your quest and the people that join you.

The gameplay is relatively simple, but the out of battle strategy is what really comes into play. Talismans are acquired throughout the game, and they are used to hold spells of their alignment (neutral, chaos and law). Alone a talisman does nothing; it needs to be fitted with a magic item (spell ingredients). Most magic items possess a spell for each alignment, and you can only use them once. This makes for some hard choices, as you can only use one of the spells offered by the powerful magic items. Depending on how you setup your character, the way the game is played varies quite a bit. It's definitely possible to rely on a specific type of spell, such as summons or attacks, but mixing and matching spells increases their effective power.

Fleshing out the game

Aside from including more of everything, there are some significant changes for the sequel. Most obvious is the graphical overhaul—everything is in polygonal 3D. Currently the graphics are not state of the art,

[top to bottom] A hasted mountain giant is a truly fearsome beast.

Closeup shot of a dragon in action.

Meteor storms rain down upon a swarm of dragons.

but they are a huge leap past the old graphics. Moving the camera around and watching the battle did not prove to be a difficult task. Rather than having a camera that moves straight up and down, as you zoom in the camera automatically pulls back also, giving you a more level view so you can still see ahead. This seems to work well but there were no truly rigorous battles to fully test the capabilities of the camera.

Now here's where the biggest changes come into play—customizing your portmanteau (spell box). In the first game you received Chaos, Neutral or Law Talismans. While you still find these now there's an

option to customize what types of talismans to use, and you can even replace all of your talismans of one type with another. For instance, you could use one row of Neutral and two rows of Law, or vice versa. Alone this doesn't amount to a great deal of variety, but now there's an alignment slider. You can adjust your character's alignment, which in turn affects your spell casting abilities. Put your alignment all the way towards Law and those spells can be cast with little mana, but in turn you increase the casting cost for Chaos and Neutral spells. Adjusting your alignment and Talisman selection is an important strategy because of the variety of spells. Players who go for one Neutral and two Law will find that they have to give up powerful spells like Raise Dead, while you lose Teleport for Neutral and Heal for Law if you decide not to take those alignments. So now you have the option of choosing versatility or specializing in certain areas, at the risk of opening a critical weakness.

"Where's the rest?"

Since the build we received for this preview was so early, there were lots of things not included. Numerous spells were absent, along with important features such as the fog of war and extended campaign. Overall the game still has quite a ways to go, but the rudimentary AI is the most obvious weakness—units stumbling over each other constantly, making movement difficult. This is all bound to improve by the final release, but there is no visible framework by which to judge how the AI will fare. As long as steps are taken to improve and expand upon the current product, this could be another odd yet entertaining title.

Magic and Mayhem 2 is no longer in the hands of its creator Mythos, and as such there are a few design changes. It's now in the hands of Charybdis, and the most significant change seems to be the use of pregenerated instead of random worlds. We'll see how this affects the replayability of the title. If publisher Bethesda Softworks manages to pull everything together in a seamless blend of strategy and action this could turn out to be a worthy successor. Fans will definitely want to keep an eye on it, but they're not the only ones. Anyone interested in a different experience could also be pleasantly surprised when the game appears on shelves in Spring of 2001. ∎

THE GOODS

GENRE Real-time Strategy

PUBLISHER Bethesda Softworks

RELEASE DATE Spring 2001

>> SOMETIMES,
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POISON IS YOUR PAST.///

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FAQs

Damn lies and statistics

by Jason Cross

150 years ago, Benjamin Disraeli said, "There are three kinds of lies: lies, damned lies, and statistics." Who would have thought that the man was a psychic—he *must* have been thinking about computer technology. When talking about hardware, we're surrounded by a sea of numbers that's confusing and misleading enough to give Einstein an aneurysm. You know what? More often than not, they don't mean jack.

Why would someone whose entire job revolves around ever-increasing hardware specifications come right out and say they're meaningless? Well, they're not totally meaningless, they're just open to enough interpretation that they don't give you a very accurate description of what's going on. There's an old saying that goes, "A statistician is someone who has their head in the oven and their feet in the freezer but will tell you that, on the average, the temperature is absolutely normal." Hardware specifications are a bit like this. They tell you peak theoretical performance that can almost never be attained and hide flaws that might be downright crippling. Let the marketing guys get a hold of some hardware specs, and you can be sure anything new will seem like the greatest invention in the history of ever.

Let's take memory as an example. You might hear about a new CPU memory technology or a video card offering unprecedented bandwidth. Gigabytes and gigabytes per second! They never tell you about all the little hidden things that affect memory usage in a real application. How long are latencies when data is requested from memory? Does the memory stream large blocks of data well but stutter and choke when reading small bits of data? When data is requested from a super-fast cache but isn't there, how long does it take to go look it up? Statistics on these kinds of things are rarely given for a reason. If users had all this information, it would become apparent that the next amazingly great leap in technology is in reality just another incremental step.

Video cards are particularly confounding. When displaying specs for fill rate, some companies promote mega*pixels* while some promote mega*texels*. Applying several textures to a single pixel is very useful, but it's not the same thing as drawing new pixels. Naturally, the ability to draw all this stuff depends on doing a whole lot of reading to and writing from memory, and you typically run out of memory bandwidth long before you run out of fill rate. Then there are technologies like the PowerVR or 3dfx Mosaic tile-based renderers that don't draw any of the pixels that are covered up by other pixels. Marketing departments love this, because they get to totally invent an "effective fill rate." They'll often say "well, we draw 250 million pixels per second, but we assume that each visible pixel covers up three other pixels. So it's just like a billion pixels per second! We have a gigapixel fill rate!"

Then there's transformation, lighting, and clipping. Everyone says they can transform and light tens of millions of triangles per second. But what kind of triangles? Are they textured with three or four textures? Is each vertex lit by five or six lights? A GeForce2 can do 20+ million triangles per second, and NVIDIA can probably show you a custom demo application that will do exactly that. But put it in a practical situation—several textures on all those triangles, several dynamic lights in the scene, and maybe even a little collision detection happening on

the processor—and the situation changes. In truth, even the best T&L hardware has a hard time pushing more than four or five million triangles a second in a *real* application. The Playstation2 can supposedly handle 60 million triangles a second, but just ask a Playstation2 developer if they can actually get more than 20-25 million in a real game.

DirectX 8 is just going to make things worse. Vertex Shaders make the geometry functions programmable, so there are fewer hard-and-fast rules. The T&L engines in cards like the GeForce2 or Radeon have a set limit on the number of lights that can affect each vertex. With video cards that can implement Vertex Shaders, the number is literally unlimited. Sure, the performance drops with every light added, but that's not what video card manufacturers will tell you. They'll list 60 million triangles per second and "unlimited hardware lights," never bothering to mention that the two can't happen at the same time. Pixel shaders will similarly give marketing departments the ability to invent names for "exclusive" features of their cards that any DirectX 8 complaint video card would be able to do.

My personal favorite useless hardware statistic is MIPS, which stands for "millions of instructions per second." Chip manufacturers love MIPS because listing how many instructions per second your chip can execute usually results in a really big and impressive-sounding number. When the Xbox was first unveiled, they even had a slide to show what a big number a trillion was, since the NVIDIA graphics chip would do over one trillion operations per second. It was just a big slide with 1,000,000,000,000 on it. Wow, that sure looks big. But what's an "instruction?" The fact is, not all processors perform the same instructions, and some can do in one instruction what might take another processor two or three.

Hardware statistics are certainly not totally useless, but they need to be considered very carefully. Modern computer components are incredibly complex, and there's almost always

some deficiency that keeps them from performing up to spec. This is why benchmarks are so important, and so aggravating. Using real applications to test hardware gives a much better indication of what you can expect from it, but it's hard to make a good benchmark. You've got to make sure the same thing is being tested each time you run it, even when you use different hardware. Not a lot of games (or other applications) give you a good, repeatable, reliable indication of performance. I guess, largely meaningless as hardware specs often are, my job has some security after all.

Q: How do you go about buying a PC to be used to run games? Is it better to build it from scratch? Is there somebody who specializes building PC's for games or somebody who reviews companies who build PC's for games?

-Jason G.

A: Buying a PC that is good for games means getting a PC with a fast processor, plenty of RAM, a big hard drive, and a fast, full-featured video card. You can get such a system from virtually any major PC vendor. There are a few companies that specialize in making PCs custom-built for gamers, though. The most well known are Falcon Northwest and Alienware. You'll occasionally see reviews of their systems right here. Building your own PC is certainly an option, but it's not necessarily the best one. You've got to know what you're doing, and what you want—building your own PC might save you a few bucks or it might not, but the chief advantage is the ability to get exactly what you want, down to the last component.

Q: I have been looking into getting a new motherboard, and have in the process come across a couple of types of slots I haven't previously heard of—AMR and CNR slots. I currently use a cable modem through an ISA network card, and I'm having difficulty locating a satisfactory motherboard with an ISA slot. Will I be able to use my current network card in a CNR slot, or find an inexpensive CNR or PCI based replacement, or will I be forced to settle for an older motherboard with an ISA slot?

-Dillon C.

A: It's true that many new motherboards don't have ISA slots—if you're lucky you can find a good new one with just one or two. AMR (Audio Modem Riser) and CMR (Communications Network Riser) slots are basically the same thing. They're small slots made to put software-based network adapters or sound cards. You can't use your ISA card in an AMR or CNR slot; it wouldn't even fit. Fortunately, you can find 10/100 network adapters for a PCI slot or AMR/CNR slot that cost between $15 and $30, so it shouldn't cost you much to replace your existing card.

Q: I recently purchased a Pentium III 667 MHz machine. In a fit of nostalgia I tried to run some of my old DOS based games. They

are completely unplayable due to the speed difference of the Pentium III and the 486 or early Pentiums. Is there anything I can do to make my old games playable again?

-Mark A.

A: There are several utilities out there designed to slow your computer down for exactly the purpose you describe—to run old DOS programs that are simply far too fast to be useable on a modern computer. One of the most popular is called Mo'Slo. You can find Mo'Slo at www.hpaa.com/moslo/.

Q: I have an A3D based sound card. Now that Creative has purchased Aureal, do you think that Creative will provide more updated EAX drivers and sound blaster compatibility for Aureal legacy products, or is it more likely that Creative might develop A3D support for its existing sound blaster products?

-Charlie M.

A: Good question, but unfortunately, I don't have a good answer. I contacted Creative Labs and the response was this: "The official reply is that we have yet to announce any plans in terms of how we will handle the Aureal situation and its ramifications." So Creative isn't saying yet, and anything I say would only be a shot in the dark. My guess is that Creative is still trying to decide how to best use the Aureal acquisition to the advantage of its customers without alienating Aureal's past customers. We probably don't know exactly what's going to happen yet because Creative probably doesn't know exactly what's going to happen yet.

Q: My computer came with an OEM version of Windows 98 that doesn't support DOS games. There are plenty of these I would still like to play. Is there any way short of a new computer to add DOS?

-David T.

A: If you really want to play a lot of old DOS games, your best bet is probably to find a computer with DOS and format a nice DOS boot disk with autoexec.bat and config.sys files all set up with whatever memory management you need, and maybe get a copy of Mo'Slo or another utility to slow down your computer, because some of those old DOS games run so fast on modern computer that they're completely unplayable.

Q: I plan on getting an Athlon 800-900 in a few months. Several people have suggested that I get the AMD Thunderbird instead. Besides the fact that some Thunderbird motherboards come with built in sound and/or NIC (which I don't need), is there any compelling reason to pay the extra $10-20 for the Thunderbird?

-Ethan G.

A: Yes. Thunderbird is the product code-name for the "Athlon with Performance Enhancing Cache Memory," as it is officially called by AMD. Basically, Thunderbird processors are Athlons with the level two cache on the processor die, running at the same speed as the

processor. On older Athlons, the L2 cache was located in the cartridge, but was comprised of separate chips running at half the main processor speed or less. Thunderbird versions of the Athlon processor are between 10-20% faster than their older counterparts, depending on the application. If you're not buying a computer for a few months, you may not even have a choice—AMD is rapidly switching over to making only the newer, faster Thunderbird model Athlons (since they're both faster and cheaper to manufacture).

Q: I noticed these 3D glasses were being sold, so that you can view your favorite first-person shooter in real 3D. My question is, do you know if these glasses will work with any first-person game?

-Mark
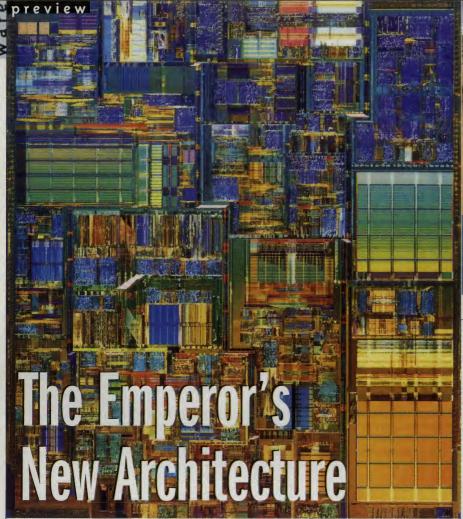
A: Most of the glasses you're referring to are of the "LCD shutter" variety. You wear glasses and look at your monitor to see a 3D image. It does this by displaying the left-eye image on the monitor while sending a signal to the glasses to close the LCD shutters over the right eye, then showing the right-eye image and closing the shutters over just the left eye. This cycle is repeated 30 times a second or more, and the result is that your eyes are tricked into seeing a 3D image.

The downside is that it's not truly 3D, but rather a 3D illusion generated by your monitor. If you look to the side, you'll just see your wall—it's not virtual reality. The quality of the illusion also depends greatly on the quality of your monitor, because if your monitor flickers or the screen phosphors don't change their state quickly enough you can see "ghosting" and other artifacts. Typically, the 3D illusion is really rather convincing, though it's tough on the eyes to play with 3D glasses on for an extended period of time. Fortunately, the technology really isn't geared to any sort of *type* of game, other than 3D. It works equally well with first-person, third-person, bird's-eye view, and any other game that uses true 3D graphics.

Q: Okay, I have a 450 MHz processor and a cheap video card that came with the computer. Will I be able to run the modern games in high resolution very well?

-Corey B.

A: No. ■

The Emperor's New Architecture

Pentium 4 is Intel's most drastic change in years

by Jason Cross

The year 2000 was tough for Intel. AMD beat them to 1GHz and chip shortages, recalls, and big problems with the Memory Translator Hub component of some motherboards seriously tarnished Intel's image as the leader in microprocessor design. Couple these setbacks with a ferocious price war that gave us all cheap processors but cut into corporate profit margins, and 2000 wasn't exactly the apex of Intel's achievements.

Just before the end of the year, and a bit later than expected, the chip giant released its first wholly new architecture since the Pentium Pro in 1995. Intel still ships more processors for home computers than any other manufacturer, and despite AMD taking away market share in 2000, it's still the undisputed emperor of the desktop computer kingdom. Is the emperor's new architecture enough, though, to polish up a recently tarnished image?

They call it NetBurst

Intel's fifth-generation processor was the Pentium, introduced in 1993, and later enhanced with MMX instructions (in 1997) to improve performance in multimedia applications. The company's sixth-generation processor was the Pentium Pro, and that fundamental design has served it well since its introduction almost five years ago. The company added MMX instructions to the Pentium Pro design to create the Pentium II, and the addition of Streaming SIMD Extensions (SSE) created the Pentium III. These were new chips with new features, but underneath them all was that same Pentium Pro architecture.

The Pentium 4 is the first of Intel's seventh generation processors. Though the product itself is known simply as the Pentium 4, the architecture is called the Intel NetBurst Micro-Architecture. It's even trademarked. Intel likes to use the catchy tag line "designed for where the Internet is going" to describe it, which should strike gamers as a familiar and disturbing trend. The marketing push behind the introduction of the Pentium III was the promise of a processor that would make your Internet experience faster and better, a dubious concept at best.
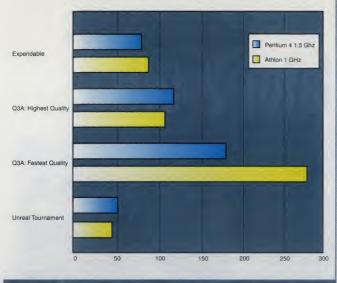
The NetBurst Micro-Architecture is supposed to make things like Java, XML, Flash, streaming video, and real-time 3D much faster through a variety of new features. We rarely hear anyone complain that their JavaScript or Flash animations execute too slowly, though the promise of improved video and audio encoding and decoding speed is nice. We're gamers first and foremost, so what we want to know is if the Pentium 4's architectural improvements will improve our games or not. The short answer is they can, but so far they usually don't.

Useful new features

A Pentium III has around 28 million transistors, while the Pentium 4 has closer to 42 million. All that silicon is being used in five main features that Intel hopes will make the Pentium 4 a chip for the future define the NetBurst Micro-Architecture that takes up all of that space.

The most obvious performance characteristic of any processor is its clock speed. Usually measured in Megahertz, though increasingly measured in Gigahertz, this measure of "cycles per second" is the primary selling point of almost every new computer. An execution pipeline 20 stages deep makes the Pentium 4 well designed for extremely high clock speeds. This means that the Pentium 4 has up to 20 instructions going at once, each at a different stage of execution. When a processor has a very deep pipeline like this, it enables higher clock speeds, and the initial Pentium 4 processors show this off. Shipping at 1.4 and 1.5 GHz, they run at up to a 25% higher clock speed than the next fastest CPU, the 1.2GHz Athlon. A long execution pipeline also has a setback, however. Modern processors try to keep themselves busy by predicting upcoming instructions, and when the prediction is wrong, a long pipeline means more processes go to waste. Fortunately, Intel has incorporated features to minimize this problem by improving the efficiency of the prediction and the penalty for mispredicting, such as an execution trace cache which stores the results of frequently executed

GAME PERFORMANCE BENCHMARKS

A 1.5 GHz Pentium 4 barely outpaces a 1 GHz Athlon in most games; Quake 3 is an exception.

instructions in the CPU's L1 cache. To make a long story short, the NetBurst architecture is designed for very high clock speeds. We'll eventually see Pentium 4 chips in excess of 3GHz, and several years from now future chips based on the NetBurst architecture could reach speeds as high as 8-10 GHz.

The Rapid Execution Engine is Intel's moniker for a double-pumped arithmetic logic unit (ALU). The part of the processor that performs common integer-based operations actually operates at twice the frequency of the rest of the processor, so a 1.5GHz Pentium 4 actually performs many common integer operations at 3 GHz. This is impressive, but it's not critically important for most games. Games certainly use integer operations, but top game performance usually comes from fast floating-point math operations.

Intel wisely saw the need for far greater memory bandwidth when designing the Pentium 4, and as such gave it a 100 MHz quad-pumped system bus. This means it has an effective speed of 400 MHz, three times the bus speed of the fastest Pentium III and even 50% faster than the 266 MHz bus speed on AMD's new DDR-RAM Athlon. The first Pentium 4 chips all use Intel's 850 motherboard and chipset, which requires dual-channel Rambus RAM. This provides an unprecedented 3.2 GB/s of memory bandwidth, but with an unfortunate price penalty. Not only is Rambus RAM expensive, but requiring it to be added in pairs is even worse. That's right, if you want 128MB in a Pentium 4 system, you've got to put in two 64MB RDRAM modules—a single 128MB module won't work.

Streaming SIMD Extensions II
The deep execution pipeline, execution trace cache, double-pumped ALU, and extremely fast bus speed and memory bandwidth are four important architectural advances of the Pentium 4, but most interesting to gamers is SSE2. With the addition of MMX, Intel introduced new instructions meant to speed up programs that perform the same operation several

times over on different pieces of data. These are called Single Instruction Multiple Data or SIMD instructions. MMX was an example of this that was limited to integer operations that weren't very useful for most games. With Streaming SIMD Extensions (SSE) in the Pentium III, Intel applied the same principle to floating-point calculations, and this proved much more useful to game developers. SSE2 adds 144 new instructions designed to be most useful in video and audio encoding and decoding, 3D graphics, and image manipulation.

As was the case when SSE was first introduced, most games don't yet support SSE2, but probably will before long. For Intel, this can't happen soon enough, as the Pentium 4 has a serious design flaw that makes it particularly weak for games—the standard floating-point unit, or FPU, is rather anemic. In fact, a 1.5 GHz Pentium 4 performs floating point operations more slowly than a 1 GHz Athlon, despite a 50% clock speed advantage and far more memory bandwidth! In most current games, the relatively weak FPU makes a 1.5 GHz Pentium 4 perform more like an 800 MHz Pentium III. That's not slow in the overall scheme of things, but it's certainly not as fast as you'd hope for, and not worth the price. There are a few games that seem to agree with the Pentium 4's architecture, though, and even without SSE2 optimizations perform far better than on any other platform.

Performance
If the Pentium 4 has all these great architectural enhancements, new instructions, tons of memory bandwidth, and a serious clock speed advantage over all competing products, it must run like a bat out of hell, right? Well, not exactly. We ran a series of benchmarks on a 1.5 GHz Pentium 4 with 256 MB of PC800 Rambus RAM, an IBM ATA-100 hard drive, a Sound Blaster Live! Value, and a GeForce 2 Ultra. Though our test system was supplied by Intel, we priced out a similarly configured system from several mail-order vendors such as Gateway, Dell, and Compaq. This setup, without monitor, goes for $2900-3100. For comparison, we ran the same benchmarks on a near-identically equipped 1GHz Athlon with 256 MB of PC133 RAM, which costs around $2000 without monitor.

Synthetic benchmarks often show only a

moderate increase in speed for the Pentium 4. Sandra, a benchmark and configuration utility from SiSoft (www.sisoftware.co.uk), can run tests that enable SSE2 enhancements for Pentium 4 processors, and it's a good way to see the potential of the platform. In general integer tests, our Pentium 4 was only 3% faster than the Athlon. The general FPU tests show the weakness of the standard floating-point unit in Intel's new processor, as the Athlon outperforms the Pentium 4 by 35%, despite a 50% clock speed advantage in Intel's favor. When SSE2 instructions are used, the floating-point performance improves so much that the Pentium 4 leads by 33%. That's still a lot less than the 50% increase in clock speed, but it's a great speed boost nonetheless. In multimedia tests using 3Dnow! on the Athlon and SSE2 on the Pentium 4, Intel's latest is less than 10% faster.

Sandra's memory benchmarks show a clear advantage in the Pentium 4's favor. ALU memory operations transferred close to 1.4 GB/s, while FPU operations transferred slightly more. The Athlon system could only muster .4 and .5 GB/s, respectively. That 400 MHz system bus and dual-channel Rambus RAM really does make a difference in memory throughput, it seems.

Synthetic benchmarks are only moderately useful, though. In *Unreal Tournament*, the Pentium 4 was about 15% faster than the Athlon. In *Expendable*, an old title without any particular processor-specific enhancements, the Pentium 4 is 11% slower. The *Quake III Arena* engine seems to love the Pentium 4, though. There are no SSE 2 enhancements in the game, but at low resolutions it runs a good 40-50% faster on the Pentium 4 than the Athlon. Even at high resolutions with every visual detail cranked up to the max to fully tax the video card, the Pentium 4 is around 5% faster.

Looking to the future
The Pentium 4 is definitely a forward-looking product. As an architecture, it's pretty good. A very weak general FPU is a sore spot, and is the primary reason why many real-world applications show either no speed advantage, or a much lower speed boost than you'd expect from a 1.5GHz machine. Current Pentium 4 systems are very expensive, largely due to high prices of Rambus RAM and the necessity for two RAM modules in each system. Right now, it's just not worth the price premium.

By the second half of 2001, the Pentium 4 will probably be a fantastic chip; Rambus RAM should be more affordable, SDRAM and DDR RAM motherboards will start to become available, SSE 2 support will be common, and the Pentium 4 will run in excess of 2 GHz. Those systems should be more affordable and far more impressive. This situation isn't new—the Pentium, when introduced at 60 MHz, wasn't exactly a barnburner, and neither was the Pentium Pro at 200 MHz. Like previous new Intel architectures, the first Pentium 4s aren't worth the money, but as the platform matures, the market will grow into it. As a product, we can't yet recommend the Pentium 4, but as a technology, it's really quite good. ∎

Five hundred smackers for a video card. Seriously.

3D Blaster Annihilator 2 Ultra

Would you spend $500 on a video card? Is there any video technology out there compelling enough to spend five bills on, knowing that something out there will always leapfrog its performance six months down the line? The GeForce2 Ultra cards, like Creative's 3D Blaster Annihilator 2 Ultra, are the first cards in a long time to test that notion. Not since the Voodoo2 was first launched has there even been an option to shell out this much money on a consumer video card for playing games.

Clearly, just as there were people who just *had* to have two Voodoo2 cards back when they cost $250 each, there are people who won't bat an eye at the idea of spending so much money on a hopped-up GeForce2. From a technical standpoint, that's exactly what the Annihilator 2 Ultra is—nothing more, nothing less. A tweak or two in NVIDIA's design and manufacturing process allowed for GeForce2 chips to be manufactured to run reliably at 250 MHz, 25% faster than the GeForce2 cards launched in the spring. More importantly, there are now even faster and more exotic DDR memories, so it's possible to provide the memory bandwidth necessary to take advantage of that 25% increase in polygon-crunching and pixel-pushing power.

The raw numbers for the Annihilator 2 Ultra are identical to other GeForce2 Ultra cards. It can transform and light a peak of just over 30 million triangles per second, and pump out exactly one billion dual-textured pixels per second. 64 MB of 230 MHz DDR RAM (effectively 460 MHz) provides over 7 gigabytes per second of memory bandwidth, a 38% increase over normal GeForce2 cards. In other words, the Ultra cards have increased memory bandwidth more than the core chip speed, and that's a good thing. GeForce2 cards were sometimes criticized for needing faster memory to really take advantage of all the chip can do. It's not uncommon

for hardcore gamers to overclock their GeForce2 card's memory, but you probably won't have much luck doing that with an Ultra. Still, Creative's BlasterControl utility is a nice and easy way to adjust things like clock speed, vsync, anti-aliasing modes, and so on.

Unfortunately, that's the only useful software you'll find in the box. For an admission price of half a grand, it's hoped that you would find some more value-added software. After witnessing the incredible software bundle in its new Sound Blaster Live! 5.1 cards, it's pretty disappointing to see that Creative doesn't stuff any free games or even game demos into its most costly card ever. Cost of materials is the likely culprit—64 MB of such high-speed DDR memory costs a pretty penny, and the GeForce2 Ultra chips themselves are very complex and not likely cheap.

Perhaps the biggest problem with spending $500 on a GeForce2 Ultra card is that, in a way, it's old technology. Certainly NVIDIA has been ahead of the game on features, and many of the advanced capabilities of the chip (like hardware

It's Ultra-fast, but also Ultra-expensive.

T&L, dot-product bump mapping, register combiners, etc.) aren't exploited in most games yet. Saying the card is "old tech" doesn't mean that you'll buy it and immediately find features in your games you can't take advantage of, because that's certainly not the case. It's only "old tech" in the sense that it's the same features that have been around since the GeForce 256 was launched at the end of last year. If you're going to spend this much money on a video card, it needs to be more than just fast—it needs to have the kind of brand-new, forward-looking technologies that ensure you'll have the hardware to take advantage of all the features of the hottest games for the next year or more. At this point in time, that would mean implementing some of the new features in DirectX 8.

So if you don't get any free games and you don't get brand-new features, what do you get for your $500? You get frame rate, plain and simple. The Annihilator 2 Ultra is hands-down the fastest card on the market (along with other GeForce2 Ultra cards). NVIDIA has delivered a killer combination of powerful brute-force technology, elegant features, and highly refined drivers that all add up to frame rates that nobody else can match. At least, not for the time being. If you just have to have the fastest video card you can buy right now, the GeForce2 Ultra is for you, and the Annihilator 2 Ultra is a great example of it. It's got great drivers and a great three-year warranty. But honestly, $500 is just too much to ask for a card with no bundled software that will be leapfrogged in performance and features by cards costing half as much in a few months. —*Jason Cross*

Blaster Utilities is a nice tool for adjusting video settings.

CG VIDMARK

We ran benchmarks on an 800Mhz Athlon with 128MB running Windows ME. The Baseline card was a GeForce DDR with NVIDIA "Detonator 3" drivers. For full information about CG Vidmark, head to www.cdmag.com/information/cgvidmark.html.

LOW RES	Baseline (GeForce DDR)	267
	Annihilator 2 Ultra	+10% 295
HIGH RES	Baseline (GeForce DDR)	157
	Annihilator 2 Ultra	+48% 223

0   50   100   150   200   250   300   350

THE GOODS
MANUFACTURER Creative Labs
MSRP $499
RATING ★★★☆☆

UPSIDE

Wonderful voice characterization, storyline, artwork and music

DOWNSIDE

Some bugs, clumsy controls, a few bizarre puzzles, more amusing than funny

[left to right] The Law Offices of W.T.D. house mumbling and crusty barristers.
Welcome to Scents and Sensibilities.

Escape From Monkey Island

Take a simian segue on the wild side with a three-headed monkey

MEMORY IS A TRICKY THING. YOU KNOW WHEN YOU PLAN TO GO BACK TO A favorite childhood place, or your hometown, all a-tingle with how inspiring it was, and how much hell you raised there, and how nothing was better than then? You then arrive there and look around and think, "Is this it? Wasn't that slide 30 feet higher? Didn't downtown always have those holiday lanterns and that roving organ grinder and his monkey? Weren't there only around '3,476,002 served'?"

The fourth iteration of a LucasArts Monkey Island series inspires that same sense of nostalgia, and the potential for letdown is enormous. Rest assured, however, that LucasArts has done it again. Escape from Monkey Island is (well, almost) as excellent an adventure as any one of its predecessors.

The mostly stout plot

As in previous *Monkey* games, you control the character of Guybrush Threepwood, (somewhat) Mighty Pirate. The game opens as Guybrush and his long-time love and now wife Elaine Marley, Governor of Melee Island,

THE GOODS

GENRE Adventure

PUBLISHER LucasArts

REQUIREMENTS Pentium 200, 32 MB RAM

MULTIPLAYER None

RATING

★★★★☆

return from their honeymoon. It turns out that Elaine has been gone for so long that the island inhabitants have declared her dead, and a certain Charles L. Charles is planning to take command of the gubernatorial seal. The governor's mansion is being destroyed and Guybrush must stop the initial assault on the property and then travel to Lucre Island to consult with Elaine's attorneys about some legal matters. Here he discovers that more is afoot than L. Charles' attempt to usurp the Melee Island government seat. The Tri-Island area is undergoing gentrification, and the pirates who live there are

being transmogrified. All of this has something to do with a powerful item known as The Ultimate Insult, and you must investigate its origin and its ramifications.

This is all you need to know about the plot, so read no plot synopses, book jackets, *Escape from Monkey Island for Dummies*, or other sources that may give away more of the plot. (OK, you can go back and read our preview for just a bit more....) This is one of the best stories in the series, and there are at least two late plot twists that are real showstoppers. The final conflict has always been over-the-top in all of the *Monkey Games*, but this one is the most

exciting one yet. There's this great big...er, never mind.

Hint book included

One of the criticisms of the *Monkey* games has always been that they are very non-intuitively difficult. Two earlier ones had "Lite" versions, for the less hard-core adventurer. You'll see no such compromises this time around. You'll also find that many of the puzzles are *extremely* difficult, and some are a bit too weird as well—like (skip to the next paragraph if you don't want to view a spoiler) applying a prosthetic arm, on which you managed to deposit some termites, to someone's walking stick. Why? So that the termites will gnaw on it enough for it to leave a sawdust trail enabling you to follow its owner so that you may find a hidden spot in the woods. Or what about stretching a piece of rubber across a manhole, creating a trampoline on which you can bounce into an upstairs window?

This game, however, comes with a sparse but complete critical path walkthrough, right in the box. Generally the inclusion of hints with any adventure game seemed in the past to be a bad idea, but if the genre is to survive, people—*new* people—have to be able to finish these games. Certainly novice play-

Miss Rivers, voiced by Edie McClure is splendid as the not-so-sweet schoolteacher.

Starbuccaneers imports the best Schmear Whiz in the Tri-Island area.

ers, and even a few seasoned ones will need the help. The game will probably average about 50 hours of gameplay (without hints) for seasoned players, and probably a lot more for newbies.

Although the game is difficult, there seem to be much better "nudges" toward puzzle solutions than in previous *Monkey Island* titles, or in LucasArts' *Grim Fandango*. Subtle and ingenious clues are everywhere, and the puzzle design in general is very strong with a few bizarre exceptions. This game could probably have done without the traditional "insult puzzle." Insult Arm Wrestling lacks the humor of any of the previous insult puzzles, and hence it seems annoying and superfluous.

And so they say

The voice acting in this game is probably the most widely competent you'll ever come across in a recent computer game. Director Darragh O'Farrell has done a magnificent job with the voice talent, and the actors themselves have turned out absolutely splendid performances, bar none. Dominic Armato, everyone's favorite Guybrush, Charity James as Elaine, and Earl Boen, *Terminator* veteran, as LeChuck reprise their roles even more brilliantly than before. The lesser characters do equally well, with Edie McClurg (who you might recall as having called *Ferris Bueller* a "righteous dude") in a witty cameo as Miss Rivers, scourge of the Pirate Transmogrification Academy.

There are cameos by many, many characters from the previous games—too many, in fact, for newer players to appreciate. But the latest characters are refresh-

ing and fabulous. Thrill to the tale of Ricardo Luigi Pierre M'Benga Chang Nehru O'Hara Casaba the Third. Watch the bird-defying antics of Marco de Pollo, a diving champion with a tortured childhood secret.

While the story is solid, the dialogue is often neither inspired nor funny. The core thread of the series has always been its humor, and while you will most definitely be amused by much of the dialogue and comedy, a lot of it is very flat, especially for those who have enough experience for comparison. Much of the humor consists of "in jokes" for fans of the series, most of which will be lost on newcomers. Stalwart fans, however, will be extremely entertained by the retrospective. And, although project leaders Sean Clarke and Mike Stemmle initially denied it, there is a brief appearance of tofu in the script.

Clarke and Stemmle's sense of comedy has its highs and lows, but the well-written dialogue makes up for much of the humor that seems situationally forced.

"Guybrush to control tower, come in control"

The game uses a modified version of the *Grim Fandango* engine, and it's simply a matter of opinion whether or not 3D models suit the series as well as 2D art. Mostly they do, and the visuals and amazing cut scenes are drop dead gorgeous. All of the locations are sharp and detailed with dynamic water animation and Van Gogh-esque cloud formations.

The control scheme just cries out for mouse support (as it did in *Grim Fandango*), especially when trying to position Guybrush in just

The beginning of a 2001 parody.

the right spot to interact with various items. The dialogue menu shouts "click on me" and then, not thinking, you do...and then it doesn't. The arrow key interface works well most of the time, but you'll still be the Boy Who Cried Mouse by the time you're done.

The game contains various bugs and minor glitches, but although others have reported a "can't finish the game" bug elsewhere, the only bugs we encountered were animation and graphics related. One in particular left Guybrush in "raft operation animation" even after he got off the raft and was supposed to be walking. There he slid, feet together, flat along the ground through the next many scenes, making rowing motions with an invisible pole.

The series music continues to improve, and kudos to Clint Bajakian and C.B. Studios, Inc. and

all of the composers for a tremendously successful score. Although the sounds will be familiar to those who have played the series, the themes are even further enhanced and richer.

No matter what, it sticks with you

At the end of the day, regardless of any quibbles heard here, and keeping in mind the anal retentive nature of critical analysis, this is a game that, like its earlier brothers, will run around in your mind and bring a pleased smile to your face long after they roll final credits. Be sure to watch them to the very (bitter) end. *"Sometimes when it's quiet, I can still hear the monkeys."* This opening quote from Guybrush, when all is said and done, will begin to apply to you.

Oh. And don't forget to try the multiplayer game. —*Cindy Yans*

Beautiful troops guard a beautiful altar. Note beautiful sky.

Sacrifice

COMPUTER
GAMES
STAMP OF
APPROVAL

Sending a group of Brainiacs to assault an altar way, way off in the distance. You wouldn't actually want to do that in the game, but it looks nice.

Shiny's apology for Messiah, and one of the year's best games

Strategy game reviews are required at some point to include serious-sounding analyses of unit balancing, resource distribution, interface refinements and lots of other boring things, so let's set the tone of this one right now. *Sacrifice* is super-freaking cool! If you read that, covered your chest with one of your dainty, pink hands and thought "Well, I never. This isn't my kind of review," then this isn't the game for you, either.

Although it says "real-time strategy" right on the box, it's really the action man's thinking game. *Sacrifice* is gorgeous, polished, groundbreaking, and a lot of other impressive-sounding adjectives, but it's also chaotic and lacking in the precise micromanagement and complex planning that endears many people to the genre. If you think you can relax enough to trade deliberate, thoughtful play style for wild action and a whole lot of

beautiful scenery, you're going to have a great time.

It's mana-riffic!
Continuing the Shiny staff's fascination with souls and creative ways to defile them (first explored in their buggy, mean spirited possession epic *Messiah*), *Sacrifice's* central theme is the subjugation of your enemies' metaphysical essences. These souls, along with the omnipresent fantasy staple of mana, are the game's two resources. You take the role of a lone wizard. Each of your spells requires a certain amount of mana to cast, which can be gathered in unlimited quantities from mana fountains scattered around each board. The closer you are to one of these fountains, the faster your mana replenishes. You can take control of a mana fountain by casting a spell that creates a structure over it (called a manalith), after which it provides resources only to you.

Mana powers your creature-creation spells as well, but these also require a certain number of souls to cast. There are a limited number of souls on each map. You generally start with a few in stock, and can pick up others scattered around the landscape, either naked or trapped inside the bodies of hapless villagers. You can also steal the souls of slain enemy units, and this struggle for the control of souls forms the core

This next shot isn't a still life. It's still pretty, though. Those wavy purple lines are beautiful but deadly, like Audrey Hepburn if she somehow got lodged in your throat.

action of the game. Whenever a creature dies, the souls originally used to cast it break free of the corpse and hover above it. If the beast belonged to you, you can grab the souls by simply running over them. Otherwise, you have to cast a jolly little guy called a Sac Doctor. He'll suck the enemy's soul into a giant syringe then skip merrily back to your home base, called your altar, where he performs a cleansing ritual on the soul, at which point it's added to your reserve and is available to power more creatures.

Both your own and your enemies' wizards are vulnerable to direct attack, but they can't be

killed. When your health bar reaches zero, you turn into a ghost—invisible to opponents and invulnerable, but incapable of either casting spells or issuing commands to your units. To reconstitute, you have to find and stand next to a mana source. In order to destroy a wizard permanently, you must fight your way to his altar and have a Sac Doctor perform a desecration ritual on it.

WarCraft it ain't
Unlike most real-time strategy games, there isn't much of an initial build-up period. You can only create two structures—the aforementioned manaliths, and remote

THE GOODS

GENRE Action/strategy

PUBLISHER Interplay

REQUIREMENTS Pentium II 300, 64 MB RAM, 3d Accelerator

MULTIPLAYER 2-4 players; Internet, LAN

RATING

★ ★ ★ ★ ★

MATURE
M
CONTENT RATED BY
ESRB

With Sacrifice, you can create museum quality artwork like this.

And this.

altars, which Sac Doctors can use to perform their cleansing rituals and save themselves the trouble of walking all the way across the map to do their job. It doesn't take much time to cast spells, so creating your initial army isn't a lengthy process. You create some creatures, build a couple of man-aliths, then go looking for trouble—all of which generally takes less than a couple of minutes.

The tried-and-true strategy game tactic of sitting back and letting your opponents pound each other and then swooping in to mop up is utterly ineffective here. Instead of weakening both participants, battles always result in either a stalemate or in one wizard actually becoming stronger (if he manages to steal a few precious souls). As long as you retrieve their souls, the loss of your units is not particularly debilitating since you can recast creatures so quickly.

Rather than utilizing a standard tech tree, the game features an RPG-like level system. Combat gives you experience, which accu-

mulates to periodically grant you access to more powerful spells. The limited availability of souls and a tech tree based on combat insure that everything moves along at an often-frantic speed. Without skimping on the tactics, *Sacrifice* enforces a refreshingly brisk pace and eliminates many of the tedious and repetitive conventions of the genre.

All of this sounds fairly straightforward—the fantasy squad tactics of *Myth* mixed with some light resource management. Where things get unique—and potentially aggravating to micro-management fans—is in the camera view. Rather than being an omniscient overseer, you control your wizard from a third person view, *a la Tomb Raider.* You see only what he sees. If you want to look at what's behind you, you have to turn around. If you're wondering what's going on halfway across the map, you have to hoof it over there and find out. It's sort of the ultimate fog of war. There's a mini-map, and you can

actually issue commands from it, but a hands-on approach is generally more effective. All of the standard unit options are available, such as formations, way-points, and hotkey groupings, but when you have forty creatures in the heat of battle it's sometimes difficult to target a specific unit. The chaos can be frustrating at first, but this frenzied style of play appears to be by design. The perspective puts you right in the thick of battle, with all the action and confusion that entails.

"Shiny" objects

While a few strategy titles have utilized this same single-unit viewpoint—*Uprising*, the *Battlezone* series, and the great granddaddy of real time strategy, *Herzog Zwei* on the Sega Genesis—none has pulled it off with as much style as *Sacrifice.* It's a gorgeous game. The art-direction is a colorful mix of Dr. Seuss and Shiny's own *MDK*, and the land-scapes stretch out far into the distance without any fogging. Games that take place in huge outdoor environments are becoming more common, but at this point it's still a striking feature. Climbing to the top of a tall hill and seeing the entire battlefield laid out before you is exhilarating.

There are over fifty different creatures available, and virtually every one is amazingly animated. There are also over fifty different offensive spells, each with impressive accompanying visuals. For instance, one creates a fierce storm and a mile-high tornado that sucks up nearby units and sends them swirling skyward before dropping them back to the ground.

You only need to complete ten levels to finish the single-player game, but in the interlude

between each one you choose one of five gods to serve during the next mission, and the plot branches accordingly. Different gods have different missions attached to each of the ten slots, and the god choice also influences what spells you receive at each point in the story. This structure provides a lot of incentive to solve the game more than once in order to play the different missions and try out various combinations of spells. One nifty feature is that every time you complete the game, the custom spell book you've built up by utilizing that particular path can be used in multiplayer matches.

Something completely different

The multiplayer mode supports up to four people at once. You can play locally over an LAN or over the Internet through a built-in matching service. For some reason, Shiny opted not to include a direct TCP/IP option, which means if you want to set up a game with your buddies and the Interplay server is down, you're out of luck. Multiplayer is generally stable, includes a slew of maps, supports a few different game variations, and retains the manic pace of the single player game. There's even a skirmish mode and a complete— *and documented!*—level editor in the package.
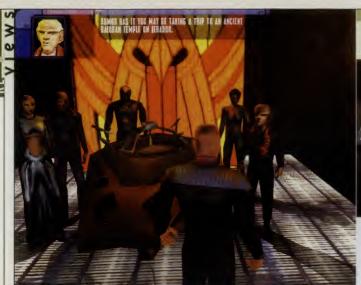
Sacrifice looks great, plays great, and sounds great. In short, it's great. As long as you can accept the fact that it's more about frenetic mayhem than careful planning, you should be just fine. Relax your expectations, get a white-knuckled death grip on the mouse, and enjoy something a little different for a change. —*Erik Wolpaw*

You're probably bored of these panoramic vistas, but notice the ring of villagers in the lower right corner...

This is what happens when you cast a volcano spell on them.

Excellent storyline and environments with three playable characters

It's too conventional

[left to right] **Exploring Deep Space Nine between each mission provides story clues and occasional propositions from the station's shady bartender, Quark.**

Captain Sisko's favorite sport of the future: low-polygon baseball.

Epic's Unreal Tournament engine powers The Fallen's visually appealing, if dark, environments.

Deep Space Nine: The Fallen

The search for good Star Trek games... the final "final frontier"

It's gaming cliché to place health items in boxes adorned with red crosses or litter the game world with crates—but it's even more cliché to begin a discussion of *Star Trek* games with a short rant on the inadequacies of previous *Trek* games. Covering nearly every definable genre in existence, computer games based on Gene Roddenberry's *Star Trek* universe have ranged from the endearingly classic to the instantly forgettable.

Perhaps the gaming public holds a higher standard for games based on a universe with such extensive background information to draw from. Thankfully, the designers at The Collective have met that standard with *Star Trek Deep Space Nine: The Fallen*, a third-person action adventure game that utilizes Epic Games' *Unreal Tournament* engine.

The Fallen draws its storyline from the *Millenium* series of books by Judith and Garfield Reeves-Stevens, and takes place during season six of the syndicated televi-

sion series. Three red orbs reportedly channel the power of the Pah-Wraiths, a race of powerful aliens exiled from their temple, a wormhole near the space station on which the television show (and this game) are based. With the "power to destroy the universe" at stake (ignore the question of why anyone would want to destroy the universe), it's imperative that *Deep Space Nine* officers Captain Sisko, Major Kira, and Lt. Commander Worf retrieve the orbs before the power falls into enemy hands.

You assume control of Sisko, Kira, or Worf, and each character offers a different experience and perspective through the same storyline. For instance, while each character completes a unique opening mission, there are several points during the game where the characters' storylines converge. Though each path features a few similar levels and environments, there are enough differences in mission objectives and design to keep future replays interesting.

Fans of the show will be happy to hear most of the original *Deep Space Nine* cast has provided their voice talent to the game, with the notable exceptions of Avery Brooks (Captain Sisko) and Colm Meaney (Chief O'Brien). Fortunately both replacement actors do an admirable job. You'll encounter many main characters from the show, and thorough exploration of the space station can uncover additional supporting characters

as well as several *Star Trek* alien races: Klingons, Bajorans, Cardassians, Jem'Hadar, Vorta, and the brand new Grigari.

The *Unreal Tournament* 3D engine beautifully renders *The Fallen*'s environments. Though most missions involve traversing dark and gloomy hallways—whether inside a starship, an underground temple, or a prison camp—judicious use of lighting and special effects evokes the right mood. Some models don't fare as well as the sharp-edged crates, stairwells, and consoles. The character models for Jadzia Dax and Chief O'Brien suffer with particularly jagged faces (with creative shading to hide those unwelcome corners) and Sisko's trademark baseball resembles a 20-sided die. Minor graphical gripes aside, *The Fallen*'s mix of detailed environments, discrete sound effects, and television show-quality score provides ample atmosphere—and one that fans of the show should find little fault in.

The game sticks close to typical third-person action gameplay, similar to other titles in the genre such as *Tomb Raider* or *Heavy Metal FAKK 2*. You'll run, jump, swim, flip switches, push buttons, find access cards, look at your character's rear-end, and shimmy your way through many sequences. Combat is supplied at just the right measure—just enough to please shooter fans but not so much to annoy the explorer—and includes ten weapons to

use against the varied hostile humanoid and alien lifeforms.

Thankfully, action sequences require ingenuity and a quick trigger finger in near equal quantity. You can't simply charge into phaser battles and expect your character to survive for long. Ammunition (for weaponry above the standard issue phaser, or Bat'Leth melee weapon for Worf) and hypospray health items are in short supply; it often requires thorough exploration to uncover most power-up objects. Ducking for cover in firefights is a must and encourages tactical gameplay over a haphazard clickfest.

Other *Trek* gadgets add to *The Fallen*'s pluses. The perennial *Trek* handheld device, the tricorder, can be used to locate secret areas, scan enemy lifeforms for weaknesses, and determine the modulation frequency on shielded items. Additionally, using the communicator provides gameplay hints and storyline tidbits from other game characters.

Star Trek: Deep Space Nine—The Fallen rises above its own occasionally clichéd and standard third-person action gameplay with an effective atmosphere, solid voice-acting, and an episode-quality storyline. It's worth a look if you're a fan of *Deep Space Nine*, a fan of *Star Trek...* or even a fan of action games that can't tell the difference between a Klingon and a Cardassian. —*Doug Radcliffe*

THE GOODS

GENRE Action

PUBLISHER Simon & Schuster

REQUIREMENTS Pentium II 233, 64 MB RAM

MULTIPLAYER None

RATING
★★★★☆

TEEN
T
CONTENT RATED BY ESRB

ACTUAL GAME FOOTAGE

TAKE COMMAND AND RECLAIM YOUR BLOODRIGHT.

Choose from 21 'Mechs® to outfit with massive weaponry. Then, lead your lancemates in an epic 30-mission, single-player campaign. Or, join a fierce multiplayer battle for up to 16 MechWarriors. Vengeance will be yours.

MECHWARRI4R
VENGEANCE

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TEEN
T
CONTENT RATED BY
ESRB
Animated Violence

Zone.com   FASA CORPORATION   Microsoft

[left to right] Get good enough and you'll be leaping cabs with bonus skaters like Spider-Man...

...and leaping around on a half-pipe off the coast of Hawaii.

[below] Break glass in case of skating emergency.

Tony Hawk's Pro Skater 2

The console sensation hits the PC, with spectacular results

One of the biggest phenomenons in console gaming over the past couple of years has been *Tony Hawk's Pro Skater*. Easily the best skating title to come out since skatepunk teens conquered mall parking lots, its frenetic action has captivated kids, teens, and adults alike. A sequel was inevitable, and *Tony Hawk's Pro Skater 2* duly made its debut this autumn on the Sony PlayStation, Sega Dreamcast, Nintendo Game Boy Color, and, yes, even on the PC.

Now take a few deep breaths before you recoil in shock. Yes, the staid gaming platform that has given us action-packed fare such as *Myst*, *Age of Empires* and untold soccer management simulations from the U.K. now boasts a port of arguably the most exciting title in the console world. Furthermore, it's very good. Unlike the bandwagon-jumping *MTV Sports: Skateboarding Featuring Some Guy Who Isn't Tony Hawk* (okay, it's Andy McDonald), this is an inspired title that emphasizes all the good

points of the console-bred original. It boasts easy-to-learn, difficult to master controls, all the high-flying stunts this side of the Venice Beach skateparks, a raft of great gameplay modes, and more attitude than Fred Durst on goofballs.

First, however, a word of caution: *Tony Hawk 2* is one of the most demanding arcade games available for any platform. So unless you're accustomed to doing more with your gamepad than letting it gather dust while you click-click-click your way through *Baldur's Gate II*, you'll be in for a wild ride (at least for a while). All of the modes of play—single-player Career Mode, Single Session, Free Skate, and multiplayer Graffiti, Trick Attack, and Tag—require unequalled accuracy in the art of D-pad pushing and button mashing. If your timing isn't nearly perfect, you'll fall down and go boom. A lot.

Once you get some practice in, you'll be leaping over obstacles and grinding rails like the 13 pros included in the game. You may lack the status of Chad Muska and Rune Glifberg in real life, but step into their shoes here and you can pull off their every Indy Stiffy and Ollie North. Or create your own skater, complete with customized skills and appearance, right down to tattoos. Your stunts take place on and over eight huge levels that look great and encompass all sorts of neat terrain. Over the course of

the game you'll tour a semi-abandoned airplane hangar, the bustling streets of the Big Apple, sunny, sleazy Venice Beach, complete with bums, and even foreign locales such as a Mexican bullring and a park in Marseilles, France.

The entire package is nicely rounded out with the 3D Real-Time Skatepark Editor. This architectural program allows you to create levels entirely from scratch. Some great homebrewed parks are already available online at some of the many Tony Hawk fan sites.

Still, there are problems to consider before plunking down that plastic. The biggest beef is that it's geared too much toward long-term play. Only one park is available at the beginning of the game; you have to unlock the remaining seven. While it's great that a skateboard title has such outstanding depth, this shouldn't come at the expense of instantaneous fun. The game is so challenging that many players will likely give up in a haze of frustration ("I fell again?!") and boredom ("man, this hangar's starting to look awfully familiar"). Forcing you to endure the grueling Career Mode just to unlock material that you have already paid for is dumb.

Another issue is with the stability of the program itself. There are intermittent slow-downs and brief stoppages during play, particularly during aerial acrobatics. The game seems to prefer Voodoo

cards over the nVIDIA line, so you may have better luck if your machine is equipped with Voodoo magic. The game also exhibited the disturbing tendency to switch to 320 x 200 resolution while booting, then crash back to Windows at this setting. As you usually can't see the video properties window at this low setting, you'll need to reboot in Safe Mode before getting back up to speed, then play around with your Windows settings. Not fun.

Despite these aggravations, there's something about *Tony Hawk's Pro Skater 2* that is irresistible. The attitude, the pulse-accelerating soundtrack, and the compulsion to pull off just one more high-scoring trick before taking a bathroom break make it a real winner. As pure arcade titles go, this is one of the better ones to be seen on the PC in some time. Don't get rid of your Dreamcast just yet, but keep your fingers crossed that you'll see more good ports like this in the future. —*Brett Todd*

THE GOODS

GENRE Skateboarding

PUBLISHER Activision

REQUIREMENTS Pentium II 233, 32MB RAM

MULTIPLAYER 2 players; Internet, LAN, same machine

RATING

★★★⯪☆

TEEN
T
CONTENT RATED BY
ESRB

UPSIDE	DOWNSIDE
Realistically simulates the physics of racing and running a sprint car team	Steep learning curve and skimpy manual that lacks information on car set-up

81

Dirt Track Racing: Sprint Cars

The greatest show on dirt gets even dirtier

What's a sprint car? Most people know these 800-horsepower dynamos only through spectacular crash footage on the evening news. Because of their short wheelbase and narrow track, these cars can cartwheel like a cheerleader on steroids and sometimes even land in the stands. What the casual observer doesn't know is that the sprint car circuit is the fifth largest racing tour in the world. Driving legends like Al Unser, A.J. Foyt, and Mario Andretti started in sprint cars. The

A costly mistake in more ways than one.

circuit itself has grown up from a gypsy-like group of mavericks racing about anything with wheels to the current top-dollar tour known as "The World Of Outlaws." It is an exciting world with its own heroes and drama played out in live events on cable sports channels. Ratbag, developer of the original Dirt Track Racing, captures this excitement in their latest stand-alone game, Dirt Track Racing: Sprint Cars.

One thing that separates sprint car races from other types of racing is that the races and tracks are short. This gives games based on

this type of racing an immediate advantage in that you do not have to spend hours behind the wheel just to earn one victory. In fact, in an hour you can finish an entire racing series. The action is short, intense, and punctuated by time spent studying track conditions and tuning your car.
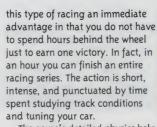
The game's detailed physics help you realize immediately why great driving talent comes from sprint car racing. Driving an overpowered car on a narrow, slippery track crammed with 20 other cars is a feat of coordination and skill almost unparalleled in motor sports. On shorter tracks you'll need to slip sideways most of the time to keep from spinning while your speed is at the maximum. The tricky balancing act between throttle and steering soon has little beads of sweat appearing on your forehead, an impression of your joystick permanently etched into your palm, and a big nasty grin on your face.

You start your career by picking out a car chassis from one of four types. Since you start with a limited amount of cash, you have to choose the cheapest chassis. You can enter one of several different series, the main difference being the amount of cash you can win. If you opt for a series with more prize money, you find the competition fiercer. In each race you can run hot laps for tuning purposes and then qualify for the heats. If you finish high enough in your first heat, you can go on to the "A" main.

Placing almost anywhere in the A main gets you cash that you need to repair damage and enhance your car. If you win a few races and move up in the standings of your series, you begin to get offers from sponsors. You can only have one sponsor at a time and you must commit to a fixed number of races. Often you get better offers when you are already committed to a sponsor, so part of the strategy is knowing when to keep your options open.

You can race on any of 20 venues based on actual tracks from a quarter to three-quarters of a mile and zero to 30 degrees of

Get used to going sideways.

Passing is a real challenge when the field is packed.

bank. Track length, bank and surface characteristics play a big part in how you must setup your car. There are dozens of tuning options with everything from tire compound, to wing angle, to torsion bar diameter. A few extra pages in the skimpy manual detailing how and why to adjust these settings would have been very helpful.

In spite of the fact that DirtTrack Racing Sprint Cars is a value title and has a suggested retail of around $20, it is a well-produced game with excellent graphics. The cars bounce and roll realistically on the rough tracks

and damage is displayed both visually and physically. As an added bonus, highlights or entire races can be saved to a file and edited like a movie. You can output the completed film in AVI format and share it with others. The audio captures every rattle and throttle blip of your car and the cars around you—it is easy to tell when someone is breathing down your tailpipe just from the sound.

Ratbag has done it again with this excellent game. Racing enthusiasts, especially those unfamiliar with sprint car racing, are in for a big, pleasant surprise. —Brett Berger

THE GOODS

GENRE Racing

PUBLISHER WizardWorks

REQUIREMENTS Pentium 300, 32 MB RAM

MULTIPLAYER 2-10 players; Internet, LAN

RATING

★★★★½

[left to right] **Using an anti-tank rocket to take down a big bad chopper.**

The horror, the horror...

Delta Force: Land Warrior

I still wanna be an airborne ranger...sort of

For the past three years NovaLogic has staked its claim on the no-man's land between realistic real-world tactical shooters and pure action games with real-world settings. Somewhere between *Rainbow Six* and *Soldier of Fortune*, the *Delta Force* games have held sway since the first of the series debuted in 1998. With the advent of *Delta Force Land Warrior*, the company seems content to continue its middling approach to the genre, with predictably middling results.

To NovaLogic's credit, at least, this third game in the series of first-person shooters with military themes, huge outdoor maps, and oodles of real-world weapons finally implements real 3D acceleration. Previous titles used the Voxel Space 32 engine, which allowed for intricate terrain and hellaciously long lines of sight, but couldn't be accelerated by 3D video cards. The result was games that screamed to be played at high resolutions so that sniping at long distances would actually work, but which would only run usably well at low resolutions. With *Land Warrior* you get smooth framerates at higher resolutions, smoother edges, less pixelation and a game world that's graphically cleaner than it was in the earlier games.

You also get a game world that is blander and less detailed than that of *Delta Force 2*. Gone are the nifty patches of tall grass, along with the intricate tucks and folds of ground that the voxels allowed. It's a good trade even so—the increased performance is well worth the loss. The presence of significant indoor environments this time also makes up for the loss of outdoor detail. Though NovaLogic's buildings are pretty much empty shells, they are at least much larger and much more interesting shells than before, and your computer doesn't immediately slow to crawl when you enter one.

The best part about the game is its multiplayer, which continue the tradition of high-intensity, long-range outdoor battles on interesting maps. Online play is unique in the gaming world, with its superb sniping opportunities and excellent real-world weapon mix. Nova-World works pretty well, and you can actually play games with thirty people in them. You can spawn LAN games from a single CD, which is nice, but co-op doesn't seem to work either locally or on NovaWorld.
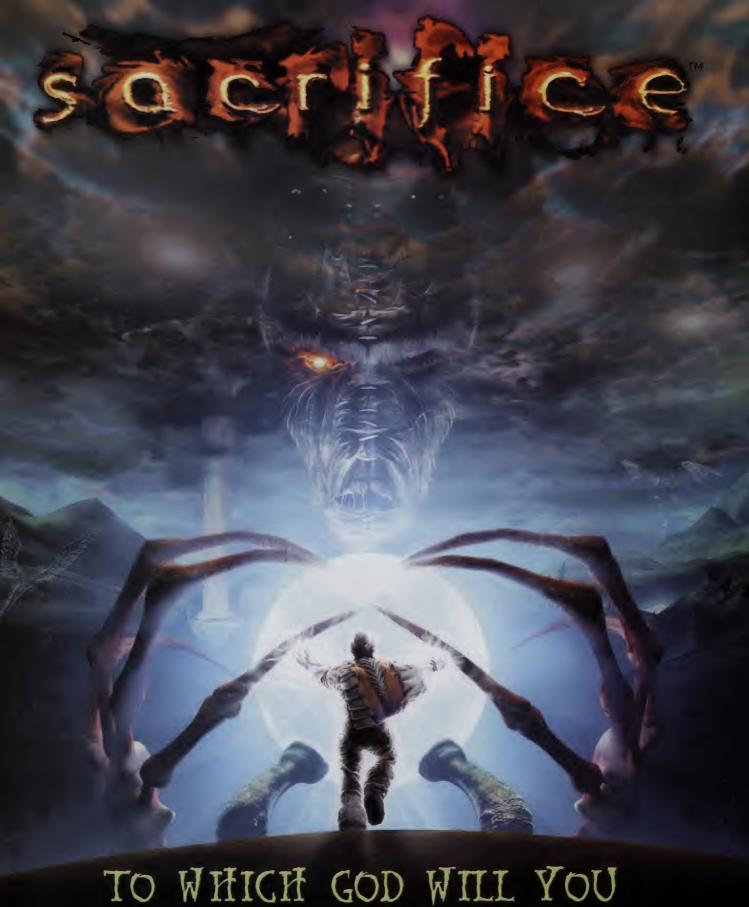
The worst part is its single-player game. You have the option of playing each mission (twenty campaign, ten quick) as one of five characters, each with his or her own specialties. It doesn't really matter, though, as you'll be equally effective regardless of your choice. On most missions, one of the characters you didn't choose will accompany you anyway, apparently to give the enemy more things to shoot at. Usually your teammate dies stupidly; on the few occasions that they survive, it's because they didn't do anything and thus weren't exposed to fire. Like the other *Delta Force* games, this one's basically a lone wolf operation. At least now you can save during a mission (a welcome addition to the game).

If your teammates are dumb, the enemy is positively moronic. "Braindead" doesn't begin to describe the terrorists you'll face. Mostly, they just stand around, even if you grenade six of their buddies into oblivion ten feet away. Sometimes they'll walk in place, hung up on a bit of terrain. Once in a while you can walk right up to them and they won't even notice you. There's not a shred of the interesting or dynamic AI behavior that you see in other contemporary shooters. Thanks to these laughable opponents, the solo game plays like some sort of 3D shooter solitaire.

It's a pity that NovaLogic can't seem to make the single player portion of the *Delta Force* games any better. There's loads of potential here for a great tactical shooter: excellent weapons, extensive outdoor maps, and interesting tactical situations. Without decent AI, however, the potential is mostly wasted. The maps are showing their age as well, being mostly variations of the same too-rounded Dali-esque landscape with different coloration depending on location. And stealth is still pretty much useless, though night vision and tree density are improved over earlier games.

Land Warrior is a blast to play multiplayer, though, and the solo game is a decent diversion. The weapons are fantastic, and deliciously varied. It's still oddly satisfying to snipe a bad guy from 800 meters. It's just depressing that three games into the series there's been precisely zero progress in the basic gameplay. NovaLogic needs to accelerate gameplay like they've accelerated graphics if this series is to thrive. —*Robert Mayer*

The third-person view of you and your teammate on the Zodiac.

THE GOODS

GENRE First-person Tactical Shooter

PUBLISHER NovaLogic

REQUIREMENTS Pentium II/Celeron 400, 64 MB RAM

MULTIPLAYER 2-32 players; Internet, LAN

RATING

★★★☆☆

sacrifice

TO WHICH GOD WILL YOU MAKE YOURS?

A sacrifice to

Charnel GOD OF DEATH

offers the power of destruction and carnage.

I am Charnel, the God of Strife, Lord of Slaughter, Master of Death. Where there is pain, I am. Where there is suffering, I flourish. Without conflict, without struggle, without me to hate, who would have cause to call themselves just? Only a fool would seek contentment in peace and tranquility.

-- Charnel, God of Death

sacrifice

Your creatures need you! Cast deadly spells to aid them.

Make a Sacrifice, secure your victory, your God feeds well.

Choose a God...
   Make your Sacrifice.

The dark beauty of Charnel's world awaits...

THE ULTIMATE sacrifice

The Holy War is over.

The Demons of Gologotha have been banished, yet the cost has been terribly high. The Creator, God of the Fyllid, has been defeated and the faith of the people has begun to wane. Petty squabbles among the five remaining Gods has caused the land to split into five mystical territories - each at war with one another. Into this divided land steps a wizard, a man haunted by his past, whose choices will shape the future. Which God will he choose? Will he sacrifice himself to change this world for the better, or will what remains of this world be sacrificed for one God's alone?

sacrifice

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-- ECTS 2000

96 out of 100. "It's worth every penny to pick up... Seriously, this is a game of the year waiting to happen and I highly recommend it."
-- Game Addicts

"Shiny is poised to do some serious damage to the conventional wisdom of what an RTS is to be. Sacrifice rewrites the rules and promises to be a huge hit."
-- Gamers Pulse

"Undoubtedly this is my choice for the strategy game of the year for 2000."
-- PC Paradox.com

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SCAPEX LEVEL EDITOR
Create Single Player
Campaigns and
Multiplayer Worlds

"Did someone say "Game of the Year?"
-- XLGaming.com

"Buy this game as soon as it is out! You will not regret it."
-- PC Monkey.com

"An average user will be flinging spells and desecrating alters in minutes."
-- Gamers Pulse

"To sum it all up, this is a great game!"
-- Gamers Ed.com

"I can't imagine a better game coming out this year..."
-- Jester.com

TOP TEN HOLIDAY SEASON PICKS: "Sacrifice may just be the kick to the butt that the strategy genre has been waiting for just as "Half Life" was with the FPS scene."
-- Sharky Games
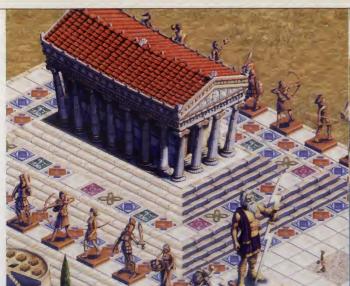
Interplay
BY GAMERS. FOR GAMERS.™

ShinY
ENTERTAINMENT

NVIDIA
graphics

www.sacrifice.net

MATURE M
CONTENT RATED BY
ESRB

Animated Blood
and Gore
Animated Violence

[left to right] Is the roof supposed to sag like that? While generally good, Zeus' graphics occasionally look cartoonish.

Hephaestus and Athena settle their differences in the heart of Thebes' breadbasket.

Zeus: Master of Olympus

Be the master of your domain with Impressions "Gods" game

When asked to name a city-builder sim, most people point to the *SimCity* series. Its three main releases and countless add-on packs have deservedly earned a cherished spot in gaming history. Maxis' flagship product has its competitors, however. With less fanfare but equal quality, Impressions Games' series of city-building titles has taken would-be urban planners on a tour of the ancient Mediterranean, from the Roman Empire of the *Caesar* games to the fabled banks of the Nile in *Pharaoh* and *Cleopatra*. In *Zeus: Master of Olympus*, Impressions turns its attention to the city-states of ancient Greece, and the result is another solid game.

Set in the mythical Heroic Age, *Zeus* doesn't pretend to be an accurate historical simulation, a fact bemoaned by some of the series' fans. The twelve chief deities of the Olympian pantheon will all periodically walk (or attack) the streets of your cities, and legendary monsters like the

Minotaur and the Lernean Hydra will make snack food out of your hapless citizens. Great "heroes" such as Theseus and Hercules will come to your rescue if you meet their mercenary demands for cash, goods, and services. These mythological complications add serious tension to the scenarios where they occur. When an angry Poseidon destroys the water-born trade and fishing that a coastal city relies upon for survival, a real sense of urgency results.

Still, the heart of *Zeus* lies in city design, not monster bashing. Veterans of the previous games will immediately notice that *Zeus* features a somewhat simpler (and therefore faster-paced) approach to urban planning. Industrial, agricultural, military and cultural buildings no longer send out "walkers" that need to find residential housing within a certain radius in order for the buildings to function. Instead, if there is available labor anywhere in the city, employees come to work. This makes city design much, much easier than it was in either *Caesar* or *Pharaoh*, both of which forced you to place noisy, polluting industries close enough to housing to find workers, but far enough away that residential appeal wasn't ruined. While this change will disappoint detail-oriented players who enjoyed constructing cities to overcome such obstacles, more casual gamers will find *Zeus* a

much more accessible title.

The fashion in which campaigns are structured is also greatly improved. Instead of forcing you to hack a brand-new city out of a howling wilderness in each scenario, most cities in *Zeus* carry forward into the next episode. For example, in the "Athens through the Ages" campaign, you'll establish new cities (Athens and two colonies) in three of the eight scenarios. The remaining five episodes of the campaign build upon Athens' early foundations, and in the process your creation will evolve from a minor village into the greatest city in Greece.

And what a Greece it is! Past Impressions titles have done a poor job simulating the world surrounding your cities, at most allowing you to trade with a few neighbors and fulfill their requests for goods or troops. In *Zeus*, an entirely new political and economic model enables much more interesting interactions with the other city-states. Allied cities will still trade with you and make occasional requests, but you can finally badger them for goods too. Colonies and vassals pay annual resource tributes to your capital. Rival cities will sometimes attack you, but you can return the favor and invade them as well (assuming your military machine is up to the task). Better still, every action you take has diplomatic consequences. Conquering a rival, win-

ning the Olympic Games, or fulfilling an ally's request will improve your standing with other cities that, if they are sufficiently impressed, may voluntarily swear allegiance to you. Conversely, attacking an ally might destroy your entire power structure. While *Zeus* is no wargame (the mechanics of actual combat in this series have always been primitive, and this title is no exception), it does provide more and better diplomatic and military options than its predecessors.

Zeus is significantly different from previous titles and a worthy addition to the series. Its faster pace, simpler city design, and mythological elements open the game to more casual players, but it retains enough depth to entertain long-time fans and adds the broader world-view they have requested for years. In other words, it's fun! — *Dave Markell*

Elite housing provides the soldiers that fuel your military.

This is World Superbike; beautiful, detailed graphics and animation coupled with detailed, highly adjustable gameplay

Released too soon after Superbike 2000

[left to right] Check out the incredible detail.

Babes and bikes on the starting grid.

Superbike 2001

COMPUTER GAMES STAMP OF APPROVAL

Sheer terror, and sheer brilliance, on two wheels

If it seems like this review of *Superbike 2001* is coming hot on the heels of the review for *Superbike 2000*, that's probably because it is. The last game in this series was released earlier this year, and it was stellar. Developer Milestone has turned around a 2001 version of the game in record time, adding this year's new bikes and riders as well as the three new circuits on the World Superbike schedule. Normally, a quick sequel lends itself to a simple rehash of the earlier version, but if you play both back to back you'll find that nothing could be further from the truth.

The most obvious changes to this year's model are certainly visual. The series has always looked great; now it looks even better. Cranking up texture quality to its highest level results in an almost photo-realistic look. Bikes and riders display minute detail without killing your frame rate, and the game runs smoother than the earlier version despite the

improved looks. You can configure a variety of graphics options to achieve the frame rate and level of detail you require. When at speed, the combination of excellent artwork and animation (such as camera jitter over bumps in on-bike views) create a slick tapestry for the eye that drips believability.

Each bike is modeled exquisitely from both the exterior views in the gorgeous replays to the on-bike views. Each model has its own on-bike view with modeling down to the digital readouts on the sexy Italian Ducatis and analog gauges on Haga's Yamaha R7. You can turn off all the screen overlays and have everything you need to ride competitively with the exception of some way to judge rear wheel spin. A handy indicator and an excellent sound effect are used to convey that aspect of bike handling.

There are new additions to gameplay that are simple but incredibly useful. A bar that you can toggle on or off gives you advice on speed. When the readout slips into the red, braking is required; when the readout is green you can twist in more throttle. This little addition is just one helpful feature available in the new training section of the game. Also included is a verbal description of each set of corners. These voice-overs let you know optimal gear and line around each circuit, and are just the kind of help new

players and veterans alike can use to improve their times. These small enhancements combined with the bike modeling—which ranges from rail riding to ultra-realistic, depending on your preference—create just the environment new players need to improve. Control is a major key to enjoying the game on its highest level and only analog joysticks with plenty of buttons seem best suited to a complete experience.

The artificial intelligence is always competent, and often excellent. With the ability to shift the AI's behavior among four different settings, you can race at a level suitable to your skills. This setting is independent of your control and physics realism settings. You can increase driving realism while limiting the AI to a lower level of ability to keep things competitive.

You may find the damage modeling a bit arcade-like—you can get back on the bike after a spill that would end your race in the real world. It's a good concession to gameplay, however, even if it isn't completely realistic. Internet matchmaking is nonexistent, but the multiplayer is good when you have friends available. There's even split screen multiplayer that works, and is quite entertaining. The worst thing about the game is that it steals away your life—going to work and paying the

bills become less important than going faster at Hockenheim.

Those that bought *Superbike 2000* may have a hard time accepting that a game released in the same year could be this much better than its predecessor. With the new training, three new circuits including the gorgeous Imola in Italy, bikes like the Honda VTR1000 and of course the stupendous graphical upgrade, there is enough new here to justify the purchase. If you haven't checked out this series, you're really missing out—this is pure white-knuckle racing that will send your adrenaline levels soaring. You probably would never climb on the back of a bike traveling 200 MPH in real life for fear of ending up in the back of an ambulance. Thankfully you can experience the thrill at home without suffering grievous physical harm. —David J. Long

THE GOODS

GENRE Racing

PUBLISHER EA Sports

REQUIREMENTS Pentium 266, 32MB RAM

MULTIPLAYER 2-6 players, Internet, LAN

RATING

★ ★ ★ ★ ★

EVERYONE
E
ESRB

Corser leads the parade through the corkscrew at famed Laguna Seca.

COMMUNICATIONS

[left to right] Cloud effects and lens flares abound.

The shock ring is nice, but you see it a lot.

Star Trek: New Worlds

Just when you thought it was safe to play Trek games

With a number of quality *Star Trek* games finally finding their way to store shelves, it's disappointing that Interplay's *Star Trek: New Worlds* provides an all-too-painful reminder of why gamers used to cringe at the mere mention of *Star Trek*. Set in the original series' universe just after the *Star Trek V* movie (a bad omen), this 3D real-time strategy game opens with the Romulans exploding a secret "Shiva" device in the Neutral Zone. The explosion causes several new systems of mineral-rich planets to appear out of nowhere. As the game begins, the Federation, the Klingons, and the Romulans are engaged in a mad scramble to exploit these planets for all their dilithium crystal worth.

So far so good, but almost everything else about the game is so lacking that you get the feeling that *New Worlds* is more of a premise than a real game. The game is positively feature-light— *New Worlds* offers a linear single-player campaign of 14 missions for each of the playable races. There is no single-player skirmish mode and no mission editor. All the usual multiplayer options are available, including free hosted play on M-Player. The game's lobby area generally seems to be empty, however.

It's actually somewhat academic—you probably won't find yourself complaining about the lack of game options, because only a glutton for punishment will work through more than a handful of the campaign missions before giving up in frustration. Part of that frustration comes from *New Worlds'* complexity. Complexity isn't a bad thing when it adds to the fun by giving you choices that affect the outcome of the game. In *New Worlds*, however, the complexity merely serves to create busy work. For example, the technology tree is so complex that the game comes with a large fold-out chart that, by comparison, makes *Alpha Centauri's* seem trivial to decipher. In order to build the most basic fighting vehicle, for example, you have to upgrade the colony hub, the construction yard, the science block, and the vehicle yard. Why bother having a basic vehicle yard if you can't even build a crummy tank with it? Similarly, *New Worlds'* resource management model has you mining not two or three raw

minerals, but six. The minerals are color-coded on the tricorder screen, but just try keeping them straight in the heat of battle.

Perhaps six minerals wouldn't be so bad, if the game's interface didn't fight you every step of the way. The combination of mouse and keyboard commands for controlling the camera's different views is so unwieldy that even the manual advises that you stick to the isometric view. The rest of the interface is also a study in frustration—there's no building queue, and the building menu only displays three buildings at time. So you'll have to constantly click through menus in order to accomplish anything. The relatively few keyboard shortcuts built into the

interface can't be remapped, and what's worse (especially for a game of this complexity), you can't issue orders while the game is paused.

The real game killer, however, is that you can't save a mission in progress. While the lack of in-mission saves might be (barely) acceptable in a fast-paced game like *Ground Control*, it's inexcusable in *New Worlds*, which is so heavily steeped in resource management and building that the missions can easily last over an hour. Don't be suckered by the *Trek* license. If you want a sci-fi-themed 3D real-time strategy game, *Ground Control* and *Dark Reign 2* are considerably better choices. —*Jason Levine*

THE GOODS

GENRE Real-time Strategy

PUBLISHER Interplay

REQUIREMENTS Pentium II 300, 64MB RAM, 3D Accelerator

MULTIPLAYER 2-3 players; Internet, LAN, modem

RATING
★★☆☆☆

TEEN
T
CONTENT RATED BY
ESRB

How can the Trek tricorder be limited to line-of-sight?

4X4 Evolution

Bouncing along in the world's most underutilized vehicles

Most SUV owners only take their pricey toys off-road to enter the parking lot of the uncharted malls of suburbia, but *4X4 Evolution* lets you drive your Explorers and Xterras wherever you like. Developer Terminal Reality has been down this road before; fans of the *Monster Truck Madness* series for Microsoft will feel right at home.

Maybe even too much. Driving the bouncy SUVs of *4X4 Evo* (in the future we will all have shortened, cooler sounding names) you'd think they have the same balloon tires as found on your favorite monster trucks. While the physics make the game feel a bit like *Moon Patrol*, it does include detailed solo game and a multiplayer component that is by far its most impressive feature. The PC version links up perfectly, seamlessly and invisibly with Macintosh and Sega Dreamcast versions of the game, which is a first for any game. Playing against a Macintosh in California and a Dreamcast in Argentina really points to the future of gaming—one where platforms become irrelevant. It also shows the danger of PC gaming; during the test period, the Mac and Dreamcast owners all had legitimate copies while almost all of the PC gamers were playing pirated versions.

Though somewhat prone to warping and occasional synchronization problems (on multiple occasions, cars "won" the race but never left the start-finish line on some systems), the overall multiplayer experience is superb. The built-in GameSpy interface gives you full chat, matchmaking, and the ability to download additional tracks without ever leaving the game, though its interface is slightly different than the regular game (and it features a goofy animation accompanying each interface element).

While the game's multiplayer is truly innovative, it seems to come at the expense of the solo game. While it initially appears deep and detailed, it has an oddly tacked-on feel. You start the game with $30,000 and no car. You select from the available cars, run some races, buy some upgrade parts, sell the car and buy something better, repeat *ad infinitum*. There's tons of stuff here—over 70 different vehicles (all real world models, from Ford Explorers to Toyota Pathfinders to Dodge Dakotas), with an ungodly number of accessories (from engine and suspension pieces to mud flaps—too bad you can't sell parts that you're no longer using).

Once you get over the sheer quantity (it might take a few days or even a week), you realize the solo game is pretty pointless. It's not a traditional racing game, in the sense that there are no real seasons where you get points for each victory and are competing against other drivers. Each series is just a bunch of individual races versus anonymous bots with prize money for placing. The overall goal isn't really to beat your opponents; rather, it's just to finish and earn some cash in order to build a better car for multiplayer. Once you've completed one series, you can keep replaying it over and over again until you're blue in the face.

The game does do a superb job of scaling the opposition to your current car. If you're happy with your existing car and are winning regularly, you can keep running the same races over and over again and make a ton of cash. Your opposition is pretty much matched up in identical cars. As you add new pieces, they scale up accordingly, giving you a fairly consistent sense of challenge

The theoretical collision model makes the races more frustrating than they should be. Physically squeezing through checkpoints can be difficult, because passing too closely will often cause you to "hit" nothing (you can also only go through the checkpoints one way, so if you miss one you're forced to back up, then move forward again). Some rocks stop you while you can drive right through others. And when you do hit an object such as a wooden construction sign, it tends to bring your two-ton vehicle nearly to a complete stop. Hitting other cars tend to launch you in all sorts of interesting directions, something exacerbated by an AI that pretty much stays on fixed paths, regardless of what's in its way.

The game is visually stunning, though the cars are proportionally too small in relation to some trackside objects (they just feel... tiny and insubstantial, which isn't a charge you'd normally level at the ludicrously sized Expeditions and Suburbans of the real world). The track design is pretty wonderful, with quite a bit of variety, lots of luscious scenery and plenty of shortcuts. While there are 16 tracks in all, the game doesn't allow you to race them backwards or with alternate routes, which makes the game more repetitious than it would have been even with something as simple as a reverse mode. The less said about the interface the better—people have died waiting for the painfully slow-scrolling text to tell you why installing a supercharger is a very good thing.

4X4 Evolution has its place in history as the first truly multiplatform multiplayer game, and will be remembered for that impressive technical accomplishment alone. It's too bad the game itself isn't nearly as memorable. —*Steve Bauman*

Yeah, I can't see anything either.

Nothing like a Suburban in the snow.

THE GOODS

GENRE Dirty Racing

PUBLISHER G.O.D

REQUIREMENTS Pentium 200MMX, 32MB RAM

MULTIPLAYER 2-8 players; Internet, LAN

RATING

★★★☆☆

The Untouchable

Real People! Real Moves! Real Bad!

Sometimes, a developer manages to create a game so original in concept and flawless in execution that it raises the bar of excellence for the entire industry. Other times, a product politely lowers the bar so that games once considered unbelievably bad can now gingerly step over it. *The Untouchable*, by Creative Edge Software, makes an unflinching karate leap into the latter category.

The Internet Movie Database describes the 1960 Jerry Lewis movie *Cinderfella* in these words: "Fowler is a clumsy simpleton, who has to care for his step mother and her two stuck-up sons Maximilian and Rupert." If you replace the word "Fowler" with "*The Untouchable*" and then ignore the resulting part about *The Untouchable* having to take care of its mother and her two stuck-up sons, you have an eerily prescient description of the game. *The Untouchable* is the clumsy simpleton of 2D fighting games.

The game's graphics consist of digital images of actors, animated and layered over ugly 256-color scrolling backgrounds. The animation frames appear to be stripped—incompetently—using Adobe Photoshop. They're all blurry and many of them still have a jagged fringe of off-color pixels surrounding the character. Although the screen zooms in and out to keep both fighters in the frame, the backgrounds are reasonably chunky even at a distance. When zoomed all the way in they become an artless tapestry of pixilated splotches.

If you somehow manage to make it past the really, really unbelievably bad graphics—and

from this point on the review is more or less academic, because you won't—the fighting system isn't good either. *The Untouchable's* hook is that it features nineteen "real" fighters utilizing "real" martial-arts styles. Here's the bio for one of the characters, Tommy Base: "This club dancer, turned martial artist, seeks to become Untouchable. With the belief that music and dance is the key to creating a lasting peace, he intends to 'get funky' on all that stand in his way." Tommy's 'get funky' martial arts style involves dancing in place for a second before throwing a punch. So much for realism.

Aside from a standard set of punch and kick variations, each character has roughly nine special moves. Oddly, no throws are included in the game and there are virtually no ranged attacks. The lack of distance moves makes it a game of close-in fighting. There are two problems with this:

A) The already terrible graphics are at their absolute worst up close. The *Untouchable* engine appears best suited for fighting games based around long-range missile combat where the camera can be pulled back about four miles.

B) The connection between pressing a button and witnessing its effect in the game could be described kindly as tenuous. To execute a move, you submit it to *The Untouchable* using your gamepad, at which point the game takes your request under advisement. Sometimes it reaches a decision immediately, but sometimes the enigmatic *Untouchable* must deliberate long and hard before deciding to let you punch. The best strategy, other than avoiding the game like the bad part of town after dark, is to march forward and hit the kick button as fast as possible.

This next paragraph comes with a disclaimer: something good is about to be said about *The Untouchable*. This should not be considered an endorsement of the game, however. All things considered, the game's music is actually not entirely awful. Through some miracle of licensing, the score

includes tracks by Future Sound Of London, Sister Machine Gun, and Juno Reactor. They're all forgettable, high energy, Tae Bo workout tracks, but compared to what's going on around it, each one is a work of unmitigated genius.

If this game was entry #70 on a "100 Awesome Games for Windows 95/98" CD that you bought at a garage sale for fifty cents, you'd still feel a little ripped off. As a

full-priced, stand-alone product, it's an embarrassment to everyone involved in the attempt to charge you money for it. Thanks to the magic of console emulation, PC owners have access to a virtually limitless variety of the world's best fighting games. Why the creators of *The Untouchable* thought you'd be willing to pay for the worst will forever remain a mystery.
—Erik Wolpaw

Oh God.

Jordan and Zodiac set aside their differences and put on a sports aerobics show.

Mullet vs. Mullet.

This exciting tiny explosion occurred during the attract mode.

THE GOODS

GENRE World's Worst Fighting Games

PUBLISHER Global Star Software

REQUIREMENTS Pentium 233, 32 MB RAM

MULTIPLAYER 2 players, same machine

RATING

★☆☆☆☆

GRAVEYARD GUARDIAN

GRAVEYARD SKELETON

Well, this looks like a pleasant spot for a picnic!

Skeletal woodsman, or disgruntled neighbor?

Join a Guild, get more power!

Wizards & Warriors

When they say it's a 'Medieval Fantasy,' they aren't kidding

Before taking on the enormous challenge that is D.W. Bradley's *Wizards & Warriors*, you need to ask yourself how much you love classic dungeon crawls. Not classic in the sense that *Baldur's Gate II* is a classic, as in something that will endure the test of time and be looked upon in a few years as a truly great example of the genre. Think more along the lines of "would I like to play *Wizardry VI* and *VII*, and all of those recurring *Might & Magic* games again?" *Wizards & Warriors* is classic role-playing in the retro sense, and, unfortunately, its insistence on remaining rooted in the past in almost every conceivable way severely limits its otherwise considerable appeal.

If you have been anxiously awaiting *Wizardry VIII*, however, this game may prove to be just the fix you are looking for. Had Sirtech released their latest sequel a few years ago, it probably would have looked and played much like this game. For some people that's

a positive thought, but for roleplayers spoiled by impressive offerings from the Black Isle stable there's a little too much retro here, and not enough revamping of the old trappings of the traditional first-person role-playing genre.

An abundance of stuff

What this game has, however, it has in abundance. Quests and monsters, as well as the kind of indepth character creation and advancement system you'd expect from David Bradley. The game focuses on the classic dungeon crawl, and it succeeds in that regard. You'll find hours and hours of playtime here and countless quests to pursue, ranging from guild-based tasks that increase your rank and ability to quests (such as delivering a rat pie to a dwarf's long lost brother or giving someone a message). The variety and availability of quests helps assure that you'll always have a goal of some sort, even when the main plot is going nowhere.

The game does have a central story, although it lacks a lot of the depth and inventiveness that other recent role-playing games have offered. An evil pharaoh has returned from his cursed grave to wreak hostile inconvenience on the people of the realm of Gael Serran. Only the mythical Mavin Sword can stop this tyrant, and it's up to you to find it. You and your party of up to five other adventurers, that is—

CRYPT SKELETON

Crypt Skeleton swings Rusted War Axe
Stinkee Minkee swings ?Club?
Crypt Skeleton missed
Stinkee Minkee missed (OutOfRange)

Even the graveyards and crypts suffer from gang problems.

all of whom you create from scratch using a detailed (if typical) character creation system. The legendary blade of power you're after was forged from twin metals, one side cursed by evil, and the other blessed by the heavens. This initial, straightforward task soon leads to treks through darkened crypts, strange bodies of water, various towns, and dungeons dark and deep. The plot isn't much for originality, but neither is most of the rest of the game.

A game of character

Since this is a party-based game there isn't one lead character, per se. Your game will end only if all of

your party members are killed (unlike *Baldur's Gate*), and dead heroes can be raised to life again at the local town church. The game includes ten different races and fifteen classes to choose from. Aside from the plain vanilla humans, elves, dwarves, and gnomes, you'll get the chance to step into the skin of humanoid crossbreeds that include elephant, tiger, lizard, pig, and rat mixes. Each race has its own strengths and weaknesses, and some make better choices for a specific class than others.

The game starts you off with a choice of four basic classes for each character—warrior, wizard, rogue, and priest. As you advance

THE GOODS

GENRE Role-playing

PUBLISHER Activision

REQUIREMENTS Pentium II 233, 64 MB RAM

MULTIPLAYER None

RATING

★★✩✩✩

MATURE
M
CONTENT RATED BY
ESRB

Picturesque statues guard the way.

Character stats screens don't change much from game to game.

and train in guilds, characters have the opportunity to change to elite classes such as barbarian, bard, monk, ninja, paladin, ranger, warlock, and samurai. After that, if you study hard and complete the right quests, there are further special classes (assassin, Zenmaster, and Valkyrie). It's actually a commendably deep character progression system.

The non-player characters may react differently to whichever of your stalwart band is highlighted at the time. Some non-player characters are prejudiced or partial to a specific race. Consequently, you will have to remain aware of which of your party members is doing the talking, since you can't get rewarded for completed quests if the specific character that accepted the task doesn't speak to whoever offered it. There are numerous other little quirks in the play mechanics. Monsters seem to be completely oblivious of each other, so if multiple types of enemies attack you, they will all focus on you and pay no notice whatsoever of anything else. Even worse is the fact that it can happen with non-combative NPC's as well, so if you are talking to someone in the woods and bandits attack, the speaker will think you're ignoring him, unaware that your party members are fighting for their lives all around him.

Clunky interface
The general interface of the game could politely be called clunky, though most are likely to find it downright unintuitive and annoying. The box claims both real-time and turn-based combat, but actually pausing the game is merely a side effect of bringing up an in-game menu, such as the save game option, making combat essentially real-time only. In all

fairness to the box, characters do take turns in attacking, and some can attack again more quickly than others.

During combat, a character's image box is grayed out until they are ready to attack once more, and while this generally works well enough, it also tends to turn fights into click fests. You simply hold the mouse cursor over the bad thing you're wailing on and keep pressing the button to slash and bash. Spell casters can choose to magically snub opponents, but the interface for selecting spells in the midst of battle is incredibly labyrinthine (you have to wade through a series of submenus first). On top of that, once a spell is selected as the character's attack of choice, it stays that way. So, if you're hastily clicking in the heat of battle, it's remarkably easy to accidentally cast a spell, causing a loss of both mana and personal tolerance.

Another downside in this game is the sheer obscurity of many of its puzzles. The game mixes together strangely absurd navigation puzzles, item searches, and item usage puzzles in perplexingly vague and confusing manners. It even uses the lack of things like climbing and jumping abilities to force you to experiment with seemingly absurd paths (falling down holes intentionally and dropping onto elevators, for example). The lack of non-player character AI can make it difficult to complete quests as well, since you'll sometimes have to chase down characters to give them things, or just wade through the muddled conversation interface.

Underwhelming
Graphically, Wizards & Warriors is underwhelming. It utilizes 3D acceleration, and while this does

He wants his mummy back.
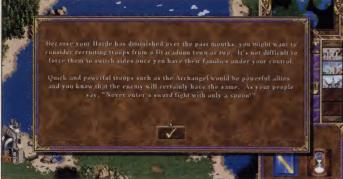
smooth out the otherwise retro and blocky look, certain monsters fare much better than others as a result. The visual style of the game could perhaps best be described as "quaint," but nothing about it really jumps out as being particularly outstanding, or even up to date. Monsters (such as the green ooze) are distinctive looking, since they are essentially polygonal special effects, but humanoid creatures look rather flat and unrefined. Magical and fire-based special effects are decent, and sometimes even mildly impressive.

The audio portion of the game is generally low-key, though the ambient and monster sound effects are fairly well done. The chinking of skeletons rising up from their grave or other moans of the undead, along with the grunts of attacking goblins, generally let you know when monsters are approaching. Voice acting, though not used often, is tolerably entertaining as well, and the sound-

track provides a moody background noise to the dungeon crawling mayhem and adventure.

Overall, Wizards & Warriors proves to be an extremely mixed bag. The game mechanics are full of holes, the interface is clunky and unintuitive, the puzzles can be mind-numbingly obscure, and the technology driving the whole thing is less than impressive. By the same token, however, the game's focus on character progression and dungeon crawls is deep and interesting in a nostalgic sort of way. The large number of quests to complete, monsters to kill, and places to explore is sure to keep any veteran dungeon crawler occupied for a long time, and on that level the game is recommendable for any roleplaying aficionado willing to put up with its idiosyncrasies and annoyances. Less tolerant gamers will want to avoid this one and stick to the Dungeons & Dragons-based titles for their role-playing fixes. —Jason D'Aprile

Heroes Chronicles: Warlords of the Wasteland

"Never enter a swordfight with only a spoon!"

Because your Horde has diminished over the past months, you might want to consider recruiting troops from a Bracaduun town or two. It's not difficult to force them to switch sides once you have their families under your control.

Quick and powerful troops such as the Archangel would be powerful allies and you know that the enemy will certainly have the same. As your people say, "Never enter a sword fight with only a spoon!"

Barbarians are wise indeed, for the sword is mightier than the spoon.

For generations the Barbarians have lived in bondage and oppression under the rule of the Wizards, until a young man named Tarnum united his people to wage war against their lords. Tarnum's destiny is far greater than he might imagine, but certainly not in the way you might suspect. He leads his brutal campaign against the Wizards in a struggle for control and power, but with consequences untold.

Heroes Chronicles: Warlords of the Wasteland is the first in a series of stand-alone games using the Heroes of Might and Magic: Shadows of Death rules and following the story of Tarnum the Barbarian. Each campaign features eight maps, each with approximately as many plot events as

Building up force in a captured town.

some of the full campaigns in Heroes of Might & Magic III, in addition to the miniature cut scenes that occur after every mission. The box proudly proclaims that Heroes Chronicles is an "entertaining series for beginners and experts alike," and that's definitely true, but don't let that lead you to believe that entertaining also means challenging. If you've completed the Armageddon's Blade campaigns, playing through Warlords of the Wasteland on impossible should not pose much of a problem. It is still a fun little game, however.

Since there is only a single campaign and eight missions, this experience doesn't last very long. This is a bit surprising, considering how much longer the other Heroes titles have been. Even though it's only $19.99, you will have to ask yourself whether you want to spend the money for a well-designed campaign and plot, or download a few of the plentiful free maps from the Internet.

The story has strength and depth, but the game structure is rather clumsy for storytelling purposes. Plot events occur on fixed days and they often keep coming several months into a mission, so you may have to purposely delay victory in order to see all of them. That conflicts with your main goal—to win as fast as possible. Overall the experience is enjoyable, however, and this game is worth considering if you are looking for a story-heavy Heroes campaign. —David Ryan Hunt

THE GOODS
GENRE Strategy

PUBLISHER 3DO

REQUIREMENTS Pentium 133, 32MB RAM

MULTIPLAYER None

RATINGS
★★★★⯪☆

Tarnum's ballista specialty is useful before you build an army.

Heroes Chronicles: Conquest of the Underworld

The Immortal Hero takes on the devils

Conquest of the Underworld, the second in 3DO's Heroes Chronicles series, continues the story of the barbarian Tarnum well after the conclusion of Warlords of the Wasteland. Tarnum was slain after a rather unfortunate duel with Rion Gryphonheart, and now he has taken on the role of the Immortal Hero. It is more a curse than an honor—he must pay a heavy price for the crimes he committed in life (namely, eternal servitude). Tarnum must atone for his crimes, and his first task is to respond to Queen Allison's call for help. The soul of Rion Gryphonheart, her father, is bound to the Underworld with no means of seeking the release it deserves. The trial Tarnum must face is twofold—he must learn to behave as a knight, and rescue the soul of the man who struck him down in battle.

Similarly to the first Heroes Chronicles game, Conquest of the Underworld features an eight-mission campaign using the Heroes of Might and Magic game system, with a strong emphasis on the plot. It's not a requirement to play the first game, as a great deal of the story is revealed through flashbacks in the various plot events. As such they share the same strengths and weaknesses. The Heroes games have always been fun, and this one is no exception. Yet the experience is decidedly short and it's too easy to miss half

Few people who have met the Immortal Hero have known his real identity, and my ancestor was one of the first to learn his secret. It was difficult for Tarnum to stay focused on his goal

Cutscenes abound.

of the story by beating missions too fast. If you want to see the entire story, you'll probably have to save before winning the mission so you can dawdle for a month or two. While there's no question that it's fun, there is little to no challenge for experienced players.

If you've enjoyed the series at all, this won't be any different. As with the other Chronicles games, it's a little too short, but if you don't mind the length and you value story over the challenge, however, then Conquest of the Underworld isn't a bad option. —David Ryan Hunt

THE GOODS
GENRE Strategy

PUBLISHER 3DO

REQUIREMENTS Pentium 133, 32MB RAM

MULTIPLAYER None

RATING
★★★★⯪☆

Blair Witch Volume 2

The Legend of Coffin Rock does the time warp again...in Burkittsville

Lazarus begins his journey with a headache.

Go to the house, and prepare the portal for my arrival.

Robin Weaver does her impression of Linda Blair.

U nlike its film counterpart, the second Blair Witch game is as enjoyable (if not better than) the first. *Blair Witch Volume 2: The Legend of Coffin Rock* is the middle title in a trilogy based on *The Blair Witch Project* mythology. Developed by Human Head Studios and using the *Nocturne* engine, it has the same look and feel as Terminal Reality's *Blair Witch Volume 1: Rustin Parr*. The interface and game controls are virtually unchanged, as is the perpetually shifting camera angle. Throw in a basement and a white owl, and you have the opposite of déjà vu—instead of being here before, you've been here "after."

Blair Witch 2 opens with a vignette from the film that describes a ritual murder that occurred at Coffin Rock in the late 1800s. The story opens with an injured soldier awakening near Burkittsville, Maryland around that time. Suffering from amnesia, he is christened "Lazarus" by the locals.
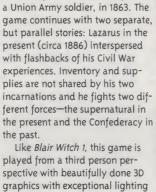
As he helps search for a lost child, a series of flashbacks reveal that he has explored the area before, as a Union Army soldier, in 1863. The game continues with two separate, but parallel stories: Lazarus in the present (circa 1886) interspersed with flashbacks of his Civil War experiences. Inventory and supplies are not shared by his two incarnations and he fights two different forces—the supernatural in the present and the Confederacy in the past.

Like *Blair Witch 1*, this game is played from a third person perspective with beautifully done 3D graphics with exceptional lighting and shadowing. The scenery tends to be dreary—mist and fog in a landscape of grays and browns. You visit only a small portion of the town and, as you flip between past and present, the landmarks change accordingly. In a welcome departure from the previous game, you will not need a compass to travel through *Blair Witch 2*. You still spend a lot of time in the woods, but you will rarely walk the same path twice. Although there is one maze-like area, it will be a cake-walk for those who survived the twisting and turning of the *Blair Witch 1* forest. As if in answer to the prayers of Doc Holliday herself, you will find ammunition and healing sticks scattered about.

Where the first installment excelled in atmosphere, this one excels in story. The sights and sounds are less consistently menacing in *Blair Witch 2*, and you will not be jumping out of your chair very often. In truth, the game really doesn't live up to its "horror" classification, nor does it warrant playing in the dark. The voice acting is well done, though not as impeccable as in *Blair Witch 1*. The ambient sounds are less dramatic, but the woods have a buzzing undercurrent of malevolence that surrounds you and keeps your senses on alert. Hell hounds and
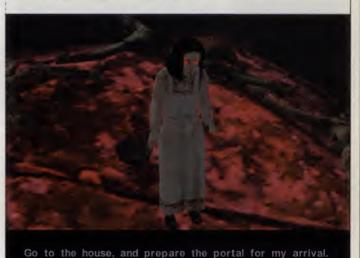
Be all that you can be... join the Union Army.

THE GOODS

GENRE Action/Adventure

PUBLISHER Gath. of Developers

REQUIREMENTS Pentium II 233, 64MB RAM

MULTIPLAYER None

RATING ★★★★☆

stick people appear to be permanent residents of these woods, while plodding zombies have been replaced by ghostly soldiers. The spirits of children—whose eerie laughter and taunts are made more distressing by their glowing eyes—also terrorize you.

Lazarus' journey of self-discovery is an engaging one, and you are likely to find yourself fully involved as fate draws you closer to the incident at Coffin Rock. Even if you are not a fan of extensive cinematics, you are apt to find yourself watching with interest as one layer after another is revealed. If you are expecting the loose ends to be tied up at the end, however, you are in for a disappointment. Whether the developers simply ran out of time or whether they planned to leave you wondering is not entirely clear.

Suffice it to say that you may have more questions than answers at the end of this adventure.

Be warned that *Blair Witch 2* is a *very* linear game. Like a puppet on a string, you are pulled along a straight path between cut scenes and have almost no control over the sequence of events. Couple this with a rather short story, and you have a release that provides an excellent entry point for those who are new to video gaming. With the exception of two combat sequences that require the dexterity of a brain surgeon, this title has high entertainment value without being difficult. While it is not likely to strain the mind or the trigger finger, *Blair Witch 2* offers a mysterious diversion and is a worthy alternative to prime time TV.
—*Cindy Kyser Morgan*

GIs prepare to bust out of the boccage.
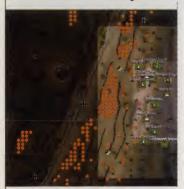
The defenses at the port of Cherbourg.

Close Combat: Invasion Normandy

The latest in this venerable series sends player back to the beach

Blame it on Spielberg, marketing or jingoism, but for whatever reason it seems game designers are bent on condemning wargamers to an eternity in Hedgerow Hell. Nonetheless, you may welcome this latest trip to Normandy, courtesy of Atomic Games.

Close Combat: Invasion Normandy is the fifth installment of this ever-popular series of real-time World War II tactical games.

Yankees hit the beach. The red dots are minefields.

THE GOODS

GENRE Wargame

PUBLISHER SSI

REQUIREMENTS Pentium 200, 32 MB RAM

MULTIPLAYER 2 players; Internet, LAN, modem, serial

RATING

★★★⯪☆

While the third and fourth *Close Combat* games strayed into tank-heavy fighting that left some of the series' most ardent fans disappointed, this latest incarnation goes back to Atomic's infantry-oriented roots.

Treadheads beware

The game gets down and dirty with small-scale infantry and tank action, paying particular attention to the morale and personality of each and every soldier on the map. Previous games in the series dealt with the Normandy, Ardennes, and Arnheim campaigns, and (in the third installment) the entire Russian front. That third game earned Atomic a lot of flak for taking what is essentially an infantry game and making tanks preeminent. The campaign aspect of the game was also criticized for being too vast and generic. Some of the data behind the game was also said to be inaccurate. Coming back for a fourth time, *Close Combat: Battle of the Bulge* instituted a new campaign framework based on battle groups and area movement, but the nature of the battle still emphasized tank-heavy fighting which often resulted in go-for-broke, mad-minute armor shootouts.

With *Invasion Normandy*, armor is now a much rarer commodity. Infantry once again rules the battlefield—in sheer numbers at least—and the game is better for it.

Most veterans of *Close Combat* believe the game's greatest strength is in the way infantry combat is modeled. Squads are made up of individuals, each with their own strengths and weaknesses. Although some of these are veritable Audie Murphys, many are more likely to cower behind the nearest available cover if not properly cared for.

For example, it's not a good idea to run infantry across a street without laying down some sort of covering fire or smoke. A fresh unit can be reduced to ruin in seconds without proper reconnaissance, use of terrain and suppression of enemy positions. In other words, the game rewards good infantry tactics. The same can't really be said for tank-heavy engagements, which were often decided during setup in earlier versions of the game.

Although there is less armor and some evidence it is more vulnerable to infantry assault, a properly handled tank can still rule the battlefield and be the most prolific killer around. They are particularly lethal in the bocage country of Normandy where they can sweep the long, straight roads there with machine gun fire.

Fortunately for the grunts, tanks are few and far between, especially for the Germans who are often stuck with obsolete French models captured in 1940. If you absolutely must have Panthers, you can add them with the handy

scenario editor that comes with the game. In addition to tweaking existing scenarios, the editor can be used to create new battles, operations, and campaigns.
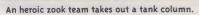
So what's new?

The biggest improvement in *Invasion Normandy* is Force Pool Management. According to the manual, battle groups represent the spearheads of regimental combat groups. Actually these are under-strength companies, usually of two rifle platoons and a heavy weapons platoon — fifteen units max.

In the operations and campaigns, each battle group is roughly identical, based on its division type. For instance, paratrooper units start with airborne infantry and some light mortars and machineguns, while leg units have some heavier stuff including a few vehicles. Now battle groups can be beefed up by replacing unwanted units with troops from the regimental force pool.

That airborne battle group may not have much use for its bazookas when it goes up against German infantry, but a light tank will sure come in handy. You can swap one for the other—just remember that only a few light tanks are available. Within the limits of what's in the force pool, it is possible to create a tank-heavy battle group, if that's your pleasure. It is also possible to

An heroic zook team takes out a tank column.

Scenarios come in a vast array of flavors.

rename units—a useful way to keep track of how you've organized your battle group or just a change to get silly. Unless you're a big Germanophile, it's also a way to identify what the units actually represent.

The maps include new terrain types including a variety of defensive works and beaches. Maps are bigger too, allowing for some tricky maneuvering among the hedgerows. Speaking of beaches, there are landing craft, but these are stationary and only there to provide cover. Also, the U.S. player can now call in naval gunfire in addition air strikes and mortar barrages. The hapless Germans get mortar barrages only.

Some Close Combat veterans say mortars have been made more lethal, but this only happened once when a German 120mm round landed in a roomful of elite command troops, killing them to a man. There is some evidence mortars are better against armor though. Otherwise, mortars still seem better at smoke and suppression than large-scale killing.

One thing that hasn't changed much is the AI—it is still not much of a challenge to a skilled player. In one battle, a company of elite German paratroopers insisted on advancing down a road even though a tank was sitting at the other end. Results: over 70 kills for the tank, none for the paratroopers. The AI's deficiencies can be reduced somewhat through several force adjustments, but ultimately nothing takes the place of a human opponent. Fortunately, those are easy enough to find online.

Welcome to Normandy
Although Invasion Normandy ships

with dozens of scenarios, the operations and campaigns are the heart of the game. The focus here is on the American landings on and behind Utah Beach and the subsequent advance to capture the important port of Cherbourg. The Americans get plenty of support, replacements, and tough paratroopers. The Germans, on the other hand, are a mixed lot ranging from barely trained reserves to elite Fallschirmjagers.

Operations and campaigns are fought out in half-day increments on a rather cluttered looking area map of the Cotentin Peninsula. More than one battle group per side can never occupy the same map location, making it impossible to bring superior force to bear and requiring some traffic control. Supply is factored in and taking an enemy depot and keeping your own supply lines open can often be critical to survival. It's not fun to find out your tanks are out of gas when the shooting starts. Battle groups can rest and refit or be disbanded to make room for fresher formations.

After movement is determined and support is assigned for the day, the action reverts to the tactical maps. Control of victory locations is key to moving off these maps and winning the campaign game. Less than decisive battles can lead to a long stay on some maps as you fight to secure those final, elusive victory locations.

The campaign system is simple and somewhat abstract, but within its limits, it accomplishes the goal of setting up tactical engagements within a larger context. It is satisfying to watch your men rack up kills, skills, and decorations over the course of several battles… and heart breaking

when they become casualties.

Oddly though, the beach landings aren't all that exciting and the airborne units don't drop in. These play out just like the set peace actions. There is no night combat. There is also an inordinately high degree of information about the enemy available. The manual says this reflects American air superiority, but the Germans have equal access to intelligence.

Here's the beef
The maps are of the usual high quality, with plenty of dead cows and crashed gliders to spice things up. The troops now have appropriate uniforms for their type, but they are so tiny it makes little difference. Armor depiction could be better too.

As it is the fifth game to use the same engine, there are few bugs. One significant problem is that it shipped without a current codec

file required to run the usual opening video of WWII documentary footage. If the video won't run, the game won't run. This can be easily corrected by downloading either the codec file or the latest version of Media Player. The battle sounds are good, but the music is best disabled.

Invasion Normandy is more of an incremental advance over its predecessors than anything really new, but it incorporates the best features of the other games and plenty of customer input into what may be the best game in the series. The Close Combat series has had a long run as computer games go, but may be showing its age as other, newer approaches to the subject come on line. Bottom line: if you already like the game concept, you'll probably love this installment. If real time tactical WWII combat is not your thing, this won't bring you around. —Willie Albright

An overview of the theater of operations.

Operation Market Garden was a well though-out plan.

German soldiers on the move in a winter wonderland.

Squad Leader

Baptism by fire for the board game's arrival on the PC

When toy giant Hasbro purchased Avalon Hill and made it clear that the strategy pioneer's timeless titles would be released under the MicroProse banner, the military buff community was divided between those who hoped for big things and those who foresaw the end for war games. Unfortunately for the people who were trying to remain optimistic, the latest release from the Avalon Hill library offers too little and arrives too late, and it is all the more depressing since this wasn't just another war game but the company's flagship title, *Squad Leader*.

This game arrives with a bit of baggage—this was not the first game that started out with the *Squad Leader* name. In fact, Atomic Games had originally been working on the PC version before Hasbro purchased Avalon Hill. The companies had a falling out and Atomic Games went on to develop the *Close Combat* series, with the first three titles being

published by Microsoft before SSI—who until recently was owned by Hasbro's rival Mattel—published two later titles including the just-released *Close Combat: Invasion Normandy* (*pay attention—there will be a quiz later... —ed.*). Adding some confusion to this is the fact that Random Games, which had previously created the (computer) *Squad Leader*-like strategy game *Soldiers at War* for SSI, seems to have re-used the same aging engine for this new title while failing to address fundamental problems.

The result is that *Squad Leader* really tries too hard to appeal to those hardcore wargame fans who wanted to experience the turn-based gameplay of the board game, while also trying to keep it simple enough to attract casual gamers. The game ultimately falls short on both counts, probably because the board game was really not your typical turn-based game—it attempted to simulate real-time action by including almost obscure concepts such as opportunity and defensive fire instead of simply being another "move your pieces, fire, let your opponent move, fire, repeat." The developers seem to have forgotten the board game's unique style of play, and basically made it a move and fire strategy game that lacks any heart.

What the board game and,

even the *Close Combat* series, really manage to convey is the sense that your actions are part of a larger battle. These were the few minutes of fighting that would remain with the soldiers the rest of their lives and would be the basis of stories that would bore their grandchildren. *Squad Leader* never invokes that experience; almost all of the maps are far too small and the gameplay simply too slow and tedious. Each soldier needs to be moved individually by drawing from his action points to do things like run, walk, crawl, shoot at an enemy or even throw a grenade. Unless you move these men one square at a time, which can be excruciating to play out, they can miss the opportunity to fire on enemy units or possibly even run into an ambush.

This is made worse still by the poor line of sight and flat, dated 2D graphics. The soldiers are almost indistinguishable and the

Is that a sand castle or an enemy pillbox?

occasional tank, jeep or other vehicles are also poorly displayed. The end results feels more like moving plastic toy soldiers and tanks on a poorly drawn map and you'll probably have more connection with those toy soldiers than you will with these generically rendered soldiers. These issues are further exacerbated by the total absence of any form of multiplayer mode—a necessary and almost fundamental feature for a war game—and by some of the most horrible voice-acting ever to grace a PC game.

The problems are somewhat diminished by the game's interface, which makes selecting leaders, squads and equipment an enjoyable process. There are also lots of campaigns and missions. When playing the American side you get to relive the glory days of the invasion of Normandy and the breakout in Northern France, while the English have to once again try to settle scores the battle at Arnhem during Operation Market Garden. The German's campaign offers players the difficult challenge of taking on the advancing allies in the later stages of the war. There is even a fully customizable random mission generator, which really offers a lot of re-playability of this title and certainly helps to redeem some of the game's failings. It is just too bad that these features had to end up in such a disappointing game. —*Peter Suciu*

THE GOODS

GENRE Strategy

PUBLISHER Hasbro

REQUIREMENTS Pentium 233, 32 MB RAM

MULTIPLAYER None

RATING

★★⯪☆☆

FIFA 2001

The series reaches its zenith

The litmus test for any game that is part of a long running sports series is to measure how it stands up against previous efforts. When you compare EA Sports' *FIFA 2000* to *FIFA 2001*, what you have are two wildly different games that are similar only in that they deal with the same subject matter. Simply put, this is a whole new ballgame.

The difference rests in the how the game plays on the pitch. The pace is more realistic, thanks in part to the fact that you can finally choose to slow things down. The series has needed a "slow" game speed setting for years, and its effect is immediately noticeable. The pitch itself is much larger, giving you more space to set up plays and to survey the landscape before committing to a maneuver. The pinball-like gameplay of years past is replaced with a much better brand of football. It's not going to pass as an exact replica for what you see on ESPN, but it's the best portrayal that the series has given us to date.

The defensive AI is very tight. Last year, it was fairly easy to weave through the computer defenders. This year, marking is much improved, and on the high-

est level of difficulty you are forced to work for each and every quality shot you take. The computer is also much better at tackling and stealing the ball from attackers. It takes a highly skilled striker or forward (such as Owen or Bergkamp) to take on more than one defender and come out unscathed, and even the best players rarely accomplish such a feat. It's simply the toughest *FIFA* game to date, and even veterans of the series may have trouble adjusting at first.

EA Sports continues to improve the visual quality of its games and *FIFA 2001* is no exception to that rule. It's easy to forget that *FIFA 2000* limited the resolution you could play at, but this version allows resolutions over 1024x768, and it certainly shows. The animation is more realistic, and the pitch itself looks extremely crisp. The shadows are truly amazing—when you play a day game, the shadows from the towers overhead loom over the field. This sets the atmosphere to a level never before achieved in a soccer game.

There are a few issues, however. It's impossible to custom configure your gamepad—you are stuck with the default control settings. Another pre-game oddity is that you cannot play a 12 or 14 minute half. You can set the clock to four, six, eight, ten, 20, or 45 minutes. A 12-minute half would be ideal as ten isn't quite long enough and 20 or 45 are marathon games.

The computer coaches never, ever use substitutions unless a player gets injured; fatigue isn't reason enough for the computer to make use of its bench. There is still no trade AI in the game. If your squad has the cash, it can buy any player in any league. Need a great offensive player? Does your team have money burning a hole in its pocket? Give Arsenal a call and buy Dennis Bergkamp. It's just that easy. It would also be nice if the game provided more post game stats other than goals scored and bookings. Who racked up the most tackles? Who won the most key headers? Which player passed the ball most effectively? These

Setting up a free kick.

Avoiding a sliding tackle. Nice move.

are key stats that managers *need* to know.

The offensive AI could use a bit of work. Most goals scored by the computer are due to great individual efforts rather than beautiful passing and playmaking. Finally, the speed burst effect lasts way too long (it would be nice if you could fine-tune this as you could in *NHL 2001*). Good players have the ability to run at full speed up and down the pitch without breathing heavy.

The audio, a feature that North American gamers complained about extensively last year, is back on par with the return of British commentator John Motson. The failed experiment of having American MLS announcers provide the play-by-play last year is hopefully one that will never again

be repeated, and it shows that the developers at EA Sports listened to feedback. Motson's commentary is not the only good aspect of the game's audio. The players themselves are vocal this year; they yell, grunt when tackled, and generally make quite a racket. This can really be heard if you (shudder the thought) disable Motson's commentary. The fans also get into the flow of the game, and cheer and boo at the right time and really let out a moan when a hard sliding tackle isn't whistled as a free kick.

If arcade soccer is your forte, then *FIFA 2001* is a must buy. It's competitive, pretty, is loaded with teams and leagues, and arguably the best hands-on soccer game on the market. —*William Abner*

Goalies are quick to yell at their defense after they give up a goal.

THE GOODS

GENRE Sports

PUBLISHER EA Sports

REQUIREMENTS Pentium 266, 32MB RAM

MULTIPLAYER 2-8 players; Internet, LAN, modem

RATING

★★★★☆

Hole 4, Par 4

Alan (F) 1st Shot 49½y

[left to right] The enhanced engine
and a panoramic view option offer
outstanding graphics.

The putting grid is now color coded
for your putting convenience.

Links 2001

COMPUTER
GAMES
STAMP OF
APPROVAL

Microsoft finally swings to the front of the pack

Shopping for sports titles has become a lot like buying a new car. The shelves are full of the 2001 models, even though the current year has barely reached its end. The challenge comes in trying to figure out what changes have made the older model outdated, and whether the latest and greatest should be your obvious choice. Here's what you will find under the hood of the latest in the Links series, *Links 2001*.

In the past the series has relied almost entirely on photorealistic renditions of the courses and the backdrops accompanying them. The results have been nice repro-ductions of courses at the cost of poorly integrated components that fail to deliver a strong sense of dimension and depth (such as trees, bushes, etc.). This latest edi-tion soups up the series with an all-new engine that allows for sur-face features such as cliffs, true lips on bunkers, and more aggres-sive vertical terrain features such as arches. Anti-aliasing has also been included, providing a seam-less integration of the on-course elements that past titles in the series have been lacking. The result of this entirely new visual approach is a significant improve-ment in the look, feel, and play of the series. The real-time captured golfer animations familiar to the Links series look more natural to their surroundings and no longer have the appearance of being pasted into the scene. The courses are beautifully modeled and demonstrate a significantly improved continuity between ele-ments from tee to green.

The power of the new engine is best demonstrated in the Mesa Roja course, a beautiful desert course built with the new Arnold Palmer Course Designer, which is included with the game. The course winds impressively through tower-ing mesas and under arches that would not have been possible in previous incarnations of the engine. In addition to surface fea-tures, there are other touches that fall strictly under the eye candy category, such as flocks of birds that fly overhead during your rounds. You can also play at higher resolutions (1280 by 1024), taking advantage of the fancy 3D card that you spent all that money on.

An almost fine-tuned engine

Ball physics have been fine tuned to perfection to reflect realistic ball flight and object collision. Try dri-ving one off the walls of the afore-mentioned mesas at Mesa Roja if you need convincing... just don't forget to duck. In addition, the bunker lips and overhangs will come into play when your drive finds that fairway bunker. Approach shots will even back up as realistically (if you can call a few pixels on your monitor "realistic").

The greens have been repro-duced with accuracy to within one centimeter using over 500 points mapped with a Global Positioning Satellite system (could you imagine a better use for a GPS satellite?). With that level of accuracy you will need all the tools provided to read your putts. The standard grid has been improved by adding a color

You can customize the clubs to hit as long, or as short, as you do in real life.

THE GOODS

GENRE Sports Simulation

PUBLISHER Microsoft Corp.

REQUIREMENTS Pentium 266, 64MB,

MULTIPLAYER 2 players; Internet, LAN, modem

RATING

★★★★⯪

EVERYONE
E
CONTENT RATED BY
ESRB

Hole 14, Par 3

Alan (F) 2nd Shot 48'

Coming up short out of the sand... can this club reach the water?

The aiming stick now has an arrow that shows the direction of the break.

Sometimes the little arrow doesn't help—been there, done that.

scale to aid in reading the severity of the break. You also have a slope indicator bar that tells you how far the ball is above or below the hole, and an arrow attached to the bottom of the aiming "stick" that indicates the direction of the break as you move it. All of these add up to easier reads on your putt and eliminates any excuses for pushing that birdie putt past the hole.

All of this power does come at a price, at least in terms of disk space. The full install is over a gigabyte in size, and because of a weird compatibility problem, some systems actually require that the CD *not* be in the CD tray in order to start the game. The problem seems to be limited to Voodoo cards (the game runs fine, with or without the CD or, on nVidia cards). If you are a Voodoo owner, you will have to run a full install in order to get the game to recognize the card (which may or may not

be a problem, depending on how much free disk space you have).

How does it handle?
Links 2001 comes fitted with three swing options—Easy, Classic, and the Powerstroke. The Easy mode is designed to require a minimal amount of timing accuracy when you swing—all you need to do is click once to start the swing and then click again when the power meter has reached one of three power marks at the top. The Classic mode offers the two or three click swing familiar to PC golf fanatics. One improvement that Microsoft has made to the Easy and Classic swing modes is the ability to relocate the swing meter to just about anywhere on the screen.

The Powerstroke is the game's contribution to the "real time" mouse swing option. To begin the swing you click on an onscreen picture of your club. This brings up

a power bar that shows your club at address to the ball. Click once and you are ready to begin your backswing, which is accomplished by dragging the mouse to the right (reversed for lefties). You then downswing by moving the mouse to the left and then clicking at the desired point of impact in order to complete the swing. The quicker you move the mouse to the left the higher the club head speed. To draw the ball you simply click prior to the club head reaching the ball, with a fade accomplished by clicking beyond the point of impact. It's a fairly simple approach, but it feels a little less comfortable than the mouse swings featured in other titles such as in *PGA 2000*, possibly because of the right to left mouse motions. While it's difficult to hit a severe hook or slice using this mode (which some people may consider a good thing), pulls and pushes were quite possible. Where this swing mode works really well is in the chipping and putting aspect of the game, where it takes little time to become comfortable with the distance control.

Base model, or options?
One thing that you do not have to worry about with the game is a lack of options. From the moment you start the game you have the ability change just about every aspect of gameplay. There are 14 golfer animations to choose from, including Sergio Garcia, Annika Sorenstam, and the legend Arnold Palmer. In addition to choosing your golfer, you also have the ability to choose from five different animation "sizes," allowing for more or less personality before and after the shot. Left-handed swings are also available, just in case swinging from the wrong side throws you off.

To further customize the gaming experience, you have the option of setting the distance for your individual clubs. If you hit your five iron 175 yards, you can set it to do so within the game. The result is the ability to recreate the shot making decisions that you would have to make on these courses in real life, and then see how those decisions play out on a course that you have only dreamed of playing, such as Royal St. Andrews. It also includes the Mode of Play Designer, which offers an impressive array of 46 different games ranging from the standard match play options to the always popular (and fun to say) Bingo Bango Bongo! Add the ability to edit each of these gaming options, the variety of games available are almost endless.

Online play is available by direct connection via modem or the Internet. If online tournaments are more your style you can register at The Links Tour site and participate in organized tourneys organized by skill level, format and swing type. Access to The Zone, Microsoft's free gaming site, will let you connect and search for other players looking for some competition.

If you like to get your hands dirty, there is the Arnold Palmer Course Designer, the same toolset used by the game's designers. You can now design your home course or let your imagination run wild. Hopefully this powerful set of design tools will inspire new courses from the designers that have been creating a vast library for other titles for several years now.

With the significantly improved graphics engine, the wealth of options and an extremely powerful course editor, the trip to pick up a copy of *Links 2001* may be your best drive to date. —*Alan Lackey*

The dreaded bunker at the infamous Road Hole at Royal St. Andrews.

0:06
Beschen

0:06

0:57

[left to right] The game offers several different camera angles.

Beware of the exploding rubber duckie!

Championship Surfer

Mattel snags a gnarly wave

Surfing is a sport that hasn't received a lot of attention from game developers. With the mainstream success of Activision's *Tony Hawk Pro Skater* series, that may change soon; you could make the argument that the two sports are actually quite similar in terms of balance and form. In *Championship Surfer*, Mattel and developer Krome Studios have created a surfing game that, despite a few annoying flaws, provides would-be wave riders a product to hang a virtual ten on.

The game provides several modes of play along with a multitude of game options. Arcade mode plops you on the shores of Sandy Beach, where you earn points by performing tricks and advanced maneuvers—and there are a boatload of tricks that you can perform. If you earn enough points, you move on to the next beach (there are ten beaches in all). Each beach is a little tougher in that you must earn more points, ride more aggressive waves, and

dodge more obstacles. The obstacles are both good and bad in that they provide a stiff challenge, but can also lead to never-ending frustration. It's difficult enough to stay on the board when attempting challenging tricks, but to be forced to dodge sea mines, sharks, divers, and floating crates can at times be a bit overwhelming.

Arcade mode is also where you unlock the beaches for use in other modes of the game. This is a convention that most console ports use—forcing you to complete certain stages in order to see the game you already paid money to play in full. Worse still, if you play in Beginner mode, you can only unlock the first four beaches. If you want to see everything you have to beat Arcade mode at Amateur and Pro difficulty to boot.

Rumble mode is by far the most enjoyable; this mode is akin to combat surfing. It's a multiplayer game in which two to four surfers ride the same wave, picking up power-ups as they go. There are several power-ups that can be snatched from the water. Surfers can be blown up, slowed down, struck by lightning, made invincible, and so forth. It's a blast to do battle with a buddy on the same PC, but sadly that's the only way in which to play. There is no computer opponent and you can only play on the same machine as the game fails to provide any kind of

Internet or modem support.

Other modes include a Championship that is simply a tournament mode where all eight players compete for the title. Free Surf allows you to practice your moves without any time constraints and Trick Attack forces you to learn certain moves in order to advance. In order to play the final mode Time Attack, you must advance through the Trick Attack mode.

The game comes with eight real-life surfers, all with their own strengths and weaknesses. Surfers are rated in categories such as power, style, flexibility, fitness, etc. It's nice to have a good mix of surfers but it would be even better if you could create your own surfer from scratch. As is, you are forced to use one of the pre-made characters. A good

selection of surfboards is also available and each has its own set of attributes, as well.

The graphics are serviceable. There are some clipping problems with some of the boards, but the surfers look good and the waves look very realistic. One technical item worth noting is that the game eats up a considerable amount of hard drive space—400 or more MB for a minimum install is a lot for an arcade surfing title.

Championship Surfer is a fun little game that could have been much better with a bit more PC-specific polish and a computer opponent for the game's Rumble Mode. As it stands, it's a game that provides a fair amount of enjoyment, but it's doubtful that the enjoyment will last long enough for most gamers to see all of the beaches. —*William Abner*

THE GOODS

GENRE Sports

PUBLISHER Mattel

REQUIREMENTS Pentium 266, 32MB RAM

MULTIPLAYER 2-4 players; same machine

RATING
★★★☆☆

EVERYONE
E
CONTENT RATED BY
ESRB

The game provides a very good sense of speed.

The new maps are certainly not lacking in atmosphere.

Proxy Mines are a pain in ChaosUT.

Unreal Tournament Game of the Year Edition

A matter of convenience

Unreal Tournament remains the industry's premiere multi-player shooter. If, for some bizarre reason, you are a fan of this genre and have yet to play this fabulous game, the new *Game of the Year Edition* is a good place to start, especially if you want a nicely wrapped package with a few new mods, maps, mutators and skins. If you already own the initial release, however, spending a fair amount of cash for material that you can download for free doesn't make a whole lot of financial sense. Even if you are starting from scratch, you can save yourself $10 bucks (you can find the original game in the bargain bins now for $19.99) by buying the original and then downloading the new mods.

For your $30 you get two new mods: *ChaosUT* and *Rocket Arena*, a few new skins, 16 additional Deathmatch maps, 11 new Capture the Flag maps, and over 12 new game mutators (Relics, No Health, etc.). What makes this package less than eye-popping is its lack of original content. The new maps and mods are fun, but there is very little here that is exclusive to this edition—both mods are available as free (albeit sizeable) downloads.

While it's unfortunate that this edition fails to deliver anything truly new, the bundle is of very high quality. *ChaosUT* adds a slew of additional weapons to the game including the bastard sword, crossbow, proxy mines, the claw, chaos sniper, vortex, and sentry turrets. There isn't really a "theme," other than the new weapons and the maps that are included that were custom built specifically for this mod.

Some of these new toys are downright deadly. A proxy mine, when activated, follows its tar-get, hopping around frantically all the while taunting its prey in a high-pitched voice. They also dole out a hefty amount of damage. The crossbow can fire explosive or poisonous bolts. The vortex is perhaps the deadliest weapon in the entire game. When you throw it, it becomes active two seconds after impact. It then proceeds to suck and compress all of its surroundings into one point—killing anything and everything within a 100-foot radius. It makes the redeemer look like a toy popgun. All in all the new weapons, while it's hard to say that they add any new strategy to the game, are a lot of fun use and add a bit more variety to the mix.

Rocket Arena is a very popular mod. It's best played as a team game (although you can play one-on-one) that sets players on a level playing field. Everyone starts out with the same health, ammo, and weapons—then all hell breaks loose. You cannot kill yourself with rocket blasts, so it really is a no-holds-barred shooting match. The team that wins a best three out of five match stays on to take on the next team. It's like a pick up game of basketball—the winner stays and the losing team goes to the back of the line.

On its face, there really isn't anything wrong with this bundle, but it's a shame that it lacks any new content to lure people that already own the original game..
—*William Abner*

The outdoor maps are all extremely well done. This map, Cranes, is one of the best.

OBJECT DATABASE

Air Force One

PREV ZOOM+ UP LEFT ROTATE DONE
NEXT ZOOM DOWN RIGHT

[left to right] The concrete canyons of San Francisco can make for a challenging battleground.

A postcard view of Northern California.

AirForce One might make an appearance—but Harrison Ford does not.

JetFighter IV: Fortress America

Take to the not-so friendly, but quite entertaining, skies

Usually "very easy to play" and "reasonable degree of realism" are terms that are mutually exclusive when it comes to talking about flight simulations. This is because the genre is dominated by two extremes, including games that fall into the arcade category and games that practically require you to have a degree in aeronautics to play because they are so realistic. Players looking to take flight without having to feel like they're learning a new skill have had a bit of luck this year, first with Microsoft's *Crimson Skies* and now with the latest from Mission Studios' *JetFighter* series, *JetFighter IV: Fortress America*. Both provide reasonable flight modeling and ease of play, but on the downside neither title has turned out to be as flawless as you might have hoped.

The latest installment in the *JetFighter* series features authentic military aircraft and ground-based units while offering a more approachable flight model and focusing on the action elements without veering too much into the arcade realm. The most arcade-like feature that you're likely to find in this flight simulation is the game's back story and plot—where a Russo-Sino coalition, in an effort to save their battered and crumbling economies, decided it would be in their best interests to invade the United States. The ground war takes a back seat in the struggle, of course, giving you the chance to play the role of heroic pilot.

Fasten your safety belt

This simple set-up means that you can look forward to flying (both in and against) a rather diverse selection of aircraft, including the American F-14 TomCat, the F-22 Raptor, the carrier-based F/A-18 SuperHornet, the Chinese/Russian MiG-29, the Ka-28 Helix, and even the ultra-advanced SU-27. These planes can be equipped with an equally impressive variety or armament from the 120 AMRAAM for air-to-air engagements to the wickedly vicious M61-A1 Vulcan machine gun. If you're a military buff looking for a nice mix of aircraft and firepower *JetFighter IV* has the goods.

Also notable are the game's eye-catching locations, with many of the 30 missions taking place over San Francisco and around Northern California. Mission Studios used real world Tactical Pilotage Charts to make this simply one of the most realistic looking flight simulations, so you can expect to buzz around the San Francisco Bay, over downtown and even take a quick flight over Alcatraz. The game also comes with a second CD-ROM full of still more detailed hi-resolution scenery—just make sure that your machine is powerful enough to support it all. Even without the hi-res assets, the game looks nearly as impressive as just about any other sim on the market, and with it this is about as real as flying over the city by the Bay gets without climbing into a real plane.

Sit back and relax

All these realistic locations and assorted aircraft obviously wouldn't be enough to satisfy anyone if the gameplay wasn't balanced and fun. Put your fears aside— *JetFighter IV* looks good, is easy to play, and offers a challenging experience without feeling too overwhelming. Instead of going with the arcade approach, the game offers what is essentially a lighter version of a hardcore flight

THE GOODS

GENRE Simulation

PUBLISHER TalonSoft

REQUIREMENTS Pentium 333, 48MB RAM

MULTIPLAYER None

RATING

★★★½☆

EVERYONE
E
CONTENT RATED BY
ESRB

Time to make a quick exit!

Under a killing moon?

And the bombs bursting in air...

simulation with relaxed physics and flight modeling.

You can easily get off the ground with just a couple of quick commands, and although a joystick makes for a better gaming experience, it's not an absolute necessity. Everything has been drastically simplified with this title—the focus is squarely on the action. Casual gamers can expect to take flight and still do reasonably well without having to learn a bunch of complicated keyboard commands, while hardcore fans can jump into some very quick and easy airborne combat. If you tend to play more "serious" simulations such as Jane's F/A-18, flying with a limited number of buttons might take a little getting used to. It feels a bit like getting behind the wheel of a fully automatic car when you are used to driving a stick shift.

The missions tend to be a little on scripted side at times, but they do offer a lot in the way of variety. There are all sorts of land and carrier-based aircraft to fly, and the missions include patrols, escorts, assaults, and interceptions. Just like the real flyboys, you probably won't know what you're going to end up doing next. The missions also vary in length and difficulty—some need to be replayed a few times, others seem almost too easy—but all are quite entertaining.

If you want to just take to skies and enjoy the sights or get into the thick of the action, the game features a quick mission generator. This allows you to get into pretty much the exact situation you want to play, whether it is escorting a VIP (say Air Force One) before dinner, or possibly

taking in some lunch-time dog fighting. You can also customize the settings such as time of day, clear or foggy skies, the strength and size of the opposition and wingmen, and the amount of anti-aircraft fire. All these options mean that novices should be able to get up to speed and learn to fly with the big boys over time, while even experienced sim fans can just increase the challenges and try to stay in the air as long as possible.

Some turbulence ahead

Unfortunately JetFighter IV suffers from a few problems that bring this otherwise lofty title back to the ground faster than a MiG that has taken a direct hit from a surface-to-air missile. The planes are all easy to fly, but they also feel almost identical, which is something that probably won't upset the causal player but will certainly turn off most of the more experienced virtual flyers. The modeling is still vastly superior to the typical arcade game, but the differences between the different aircraft are so subtle that it essentially doesn't matter which plane you're flying—no more so than choosing a different skin in the typical shooter, at any rate.

The game's excellent graphics also suffer from some minor video card glitches that disrupt the otherwise beautiful scenery, and the frame rate drops a bit at higher resolution settings. You will also need a fairly powerful machine to run the game—it has pretty steep system requirements, and that is somewhat disappointing when you consider that it skips a lot of the complex physics calculations. Using the hi-resolution assets

I think we have a problem, a big problem.

only makes matters worse, and anything but a top of the line system is going to have trouble keeping up with this JetFighter. To be fair, it does have killer graphics and stunning locations; if you can run this game, you will have one of the best looking flight sims on the market.

If those were the only problems, this would be a must buy. Unfortunately there are a few other areas where the game seems like it was rushed out the door. It doesn't seem to support force feedback controllers, even though the box copy proclaims that it . does. At times the controller drives seemed to load improperly (nixing joystick support)—this tends to happen when you play the game for the first time after rebooting your system.

More troublesome is the lack of multiplayer support in the final version, particularly since it is listed on the box and included in the

game menu. This was also supposed to be one of the game's big selling points because of the ease of play, which could have made for fun-filled deathmatches in the sky. Apparently the multiplayer was taken out at the last minute out because of problems in the code. This seriously hurts an otherwise unique and entertaining game and certainly limits some of the appeal.

If you ever felt intimidated by hardcore titles like Falcon 4.0 or Jane's F/A-18 but weren't satisfied with the crop of arcade flying games, this could be the right sim for you. As long as you don't mind taking the solo route and understand that this game is not even attempting to simulate a fully realistic flying experience, JetFighter IV has a lot going for it. The lush ground terrain and scenery make this one of the richest looking settings for some quick action. —Peter Suciu

[clockwise from upperleft] Snow hinders movement as well as patriot snipers.
Landing the troops is easy, keeping them alive less so.
The peaceful community of Montesanto is home to a bloodbath.

Imperial Strike

Slaughter in Seattle

A possible Japanese invasion of the contiguous United States was a very real fear not just after Peal Harbor, but also throughout much of the first half of the twentieth century. Political swings in Japan inevitably brought corresponding military strength swings along the United States' Pacific coast, most often in California (notably San Francisco). It is easy to forget today, in an era of cross-continental jet flights and the interstate highway system, just how formidable a barrier to rapid movement of forces the Rocky Mountains present. *Imperial Strike*, TalonSoft's expansion pack to its superb Pacific front wargame *Rising Sun*, presents as its center-piece two campaigns that hypothesize just such a Japanese attack following Pearl Harbor.

The focus of *Rising Sun*, like its predecessors, is firmly entrenched on land combat, so the system is very well suited for this new exploration of land combat in North America. Two new linked campaign games are included (sadly, new dynamic campaigns are missing). "Invasion America!" postulates that a Japanese capture of Seattle would demoralize the Americans and force a truce—one that presumably would see Japan in control of the United States' Pacific coast. "Reaping the Whirlwind!" is the corresponding defensive version. It's pretty easy to question the plausibility of these campaigns (so easy that TalonSoft admits as much in the introductions). The capture of *Seattle* will demoralize the U.S. to such an extent that it will willingly cede everything west of the Rockies? Please. The Japanese Imperium did not have the strongest grasp of American mores, but still…

Fortunately, despite the dubious plausibility of the campaign games' premise, their execution is strong. Although the marketing focuses on American defense against the invaders, it is actually great fun to march towards Seattle as the would-be conquerors. The snows of the interior Pacific Northwest present some new challenges, and it is easy to take the role of the Japanese commander moving his troops through unfamiliar terrain. As battles take place in larger cities, one can almost, if not quite, get a taste of combat moving from house to house with American partisans popping up unexpectedly. As one of the intro-

ductions proclaims, "it seems as if every American owns a rifle." Equally challenging and fun, in a patriotic sort of way, is the defense of American soil.

Ten scenarios are included. In keeping with the spirit of the game, most of them recommend that you play as the Allies. Most are also firmly in the middle of TalonSoft's complexity scale ranking, usually rating four or five. The scenarios are all firmly in the traditional Pacific Theatre. No American (or even Alaskan) invasions are to be found. They are finely balanced and every bit as excellent—and as fun to play—as those found in the original game. Of particular note is "Toehold in the Admiralties," which presents objectives easy to capture, but difficult to hold. Details such as this add to the richness of the game. After playing through the new additions, however, the nagging question of "what else?" remains. Certainly, ten scenarios and two campaigns are not a bad bargain for a $20 expansion. You have to wonder, though, why the scenarios that were posted on TalonSoft's web-site over the summer were not

also included. This would have been a bonus for anyone who had missed them the first time around. Also alarming are the occasional crashes (not found in the original) and a lack of polish in places (such as typos in intro-ductory briefings). No changes—major or minor—to the engine have been introduced. Sure, *Rising Sun* was a very polished, well-executed game—the strongest of any from TalonSoft. It would be nice to have an expansion pack that offers something other than merely more of the same, however (Microsoft's recent expansion pack for *Age of Empires II* is a good example). In the end, that is precisely what *Imperial Strike* is—more of the same. Luckily, that happens to mean more of the same fun and challenging campaigns and scenarios.

If you are a fan of *Rising Sun* and have exhausted the original game's scenarios and campaigns, then you will doubtlessly find more to like here, but don't expect anything groundbreaking. Despite some niggling unpolished areas, *Imperial Strike* is a fine expansion pack for a superb game. —*Carl Lund*

THE GOODS

GENRE wargame

PUBLISHER Talonsoft

REQUIREMENTS Rising Sun, Pentium, 16 MB RAM

MULTIPLAYER 2-16 players; Internet, LAN, modem, serial connection

RATING ★★★⯪☆

Game Developers Conference
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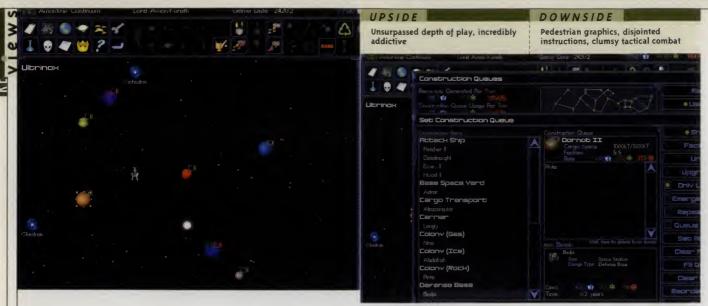
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Unsurpassed depth of play, incredibly addictive

Pedestrian graphics, disjointed instructions, clumsy tactical combat

[left to right] **The main window shows quadrants and gives details about planets and ships.**

From the construction screen you can build ships, unit and facilities. A queue system makes the process easy.

Space Empires IV

COMPUTER GAMES STAMP OF APPROVAL

Deep, deep space...deep, deep strategy

Let's get this straight—this is a "4X" (eXplore, eXpand, eXploit, eXterminate) strategy game released in 2000 with 2-D graphics, basic animation, rinky-tink sound, and no cut scenes that is fun and intelligent? How can that be? The hook is something that many developers forget—game play.

Space Empires IV has all the usual components of a space exploration game. Races have emotional, physical and intellectual characteristics that limit some abilities while increasing others. Some planets are better targets for colonization than others. Worm holes facilitate warping from one system to another. Varying planet sizes define what kinds of facilities can be built on them. Exploitation of resources is essential to running an empire. A tech tree increases an empire's fleet and facility capabilities. Ships can be designed, built and assigned duties. Other races can be traded with, turned into allies, subjugated or exterminated. The interface is a system of related

menus and toolbars allowing point-and-click control.

Tactical combat is equal parts tedium and frustration. Vessels advance their movement allowance across the sector screen; thus several turns pass before contact occurs. For simplicity's sake, fleets can be divided into combat groups that follow one leader. Vessels' weapons are displayed in a sidebar with no indication of range, so combat is an exercise in clicking until luck strikes. If you absolutely must watch the combat, an auto battle exists. For some reason the screen sides are boundaries, trapping fleeing ships.

It's is a little thin in other places as well. No editor is provided, but every data file can be changed with Notepad. Instructions are spread between a tutorial, on-line guide, HTML manual and printed manual. Multiplayer is limited to an odd play by email system where one player acts as post office.

All of these features have been with us since the mid-1980s. But the element that sets the game apart from other games in the genre is common sense—it's the glue that binds its components together. You can discern the reasons for design decisions through their utility. Ship supply and re-supply is a prime example. Ships have a finite amount of fuel. When they run out, they creep along in a largely useless manner. Other games give them better

range by increasing engine quality; Space Empires IV improves on this by introducing re-supply depots, which make the tiniest planet crucial in sectors that would otherwise be ignored. Such a concept is integral to terrestrial empires, why not galactic ones? Likewise, each ship and facility require maintenance that draws on your resources. While maintenance costs are common, the best remedy in this game is scrapping or mothballing ships rather than increasing resources. It borders on micro-management, but the sheer reasonableness of it removes any tedium. Naturally, you can hand the management of individual sectors or duties over to AI ministers. This pragmatism pervades the game, including the creation of auxiliary vessels for fleets. Supply, repair, and hospital ships untie fleets from their sectors.

Such solid design sense does not rule out the exotic. The extensive tech tree provides weapons that create storms and either repulse or draw in ships. The AI races can be dealt with through an extensive diplomatic system. Plagues, natural disasters and populace unrest cause problems but can be dealt with—pragmatically. The counter-intelligence and espionage operations are enough to keep James Bond happy.

Unlike most games, victory need not be had by extermination (does that make it a "3X" game?

In tactical combat, a big fleet gangs up on a single enemy. The weapons of the selected ship are on the right.

—ed.). Victory conditions include other factors such as player score or greatest number of turns at peace. Other races will surrender if faced with overwhelming power.

De-emphasizing war is a good thing because the martial portion of this game is the weakest. Strategically, the game is fine. Fleets are easy to assemble and maneuver. You give them orders on formations, tactics, and detailed instructions for ramming, boarding, and so on. Fleet composition and instructions are comprehensive and well-thought strategies pay off if you choose the strategic combat mode. Many players enjoy "hands-on" combat and will want to use the tactical mode, however. They'll regret it.

Overall, Space Empires succeeds magnificently where so many other "polished" products have failed. —Jim Cobb

THE GOODS

GENRE Space Strategy

PUBLISHER Shrapnel Games

REQUIREMENTS Pentium, 32MB RAM

MULTIPLAYER 2-11 players; same machine, PBEM

RATING
★ ★ ★ ★ ☆

Motocross Mania

Sometimes you get what you pay for

Motocross fans starved for thrills don't usually seek sustenance on the PC. Though Microsoft's superb *Motocross Madness* put the platform back on their radar, home consoles boast a better two-wheeled repertoire. Presumably these systems are better suited to the sport's unique control method and free form style of action. Whatever the truth may be, the semi-underwhelming *Motocross Mania* won't be coaxing many people away from their television.

As play options go, this title is quite robust. After configuring rider and bike skins, you can participate in a slew of single and multi-player events. For the antsy gamers, Quick Race and Time Attack modes are offered. Several entertaining contest types fill out this section, ranging from skillful Supercross runs to stunt-inducing Freestyle setups, Motocross jaunts, and waypoint-centric Baja competitions. Dedicated competitors can also elect to participate in a Championship season, although all race variants will satisfy demanding gearheads.

Armchair grease monkeys can tweak their gas, brakes, tires, and more as well. Once on the track, even a minor adjustment can give a rider an edge over their rivals. The schizophrenic physics model claims responsibility for this design quirk. While at times it accurately registers gravity, momentum, and collisions, on other occasions you can take a hernia-inducing fall off a cliff with no adverse effects. This sense of unpredictability plagues the races. Despite being enjoyably arcade-like in play, one can't help but imagine that the title tries too hard to mimic a proper simulation.

Said authenticity also encompasses angled movement and character animation. It's essential that you learn to lean into turns, powerslide, and brace for impact. You couldn't become unseated more frequently if you were riding a mechanical bull. Luckily, spectacular crashes ensue, and this helps to dull your feelings of frustration. You'll laugh when a hapless racer flies over a mountain, tumbles down the slope smacking into every object, and comes to rest limbs akimbo in the road. Only an instant restart routine, which immediately places former road kill back at the point where it left the pavement, prevents certain disaster.

There is plenty of room for mishaps regardless. Keeping pace with the pack is a challenge few can rise to. Slip up on one of the many bumps, hills, or broken down bridges, and you'll be eating dust the rest of the way. Cash earned through top placement will finance the better engines, chassis, brakes, and suspensions that will tip the odds in the good guys' favor. The upgrade system is quite primitive in nature, but that doesn't prevent it from enhancing the experience. Like the finished product, it holds its own, but does nothing above and beyond the call of duty.

On a positive note, there's a lot to like about the title. The tracks are immense and can be explored in their vast entirety. Tons of rocky outcrops or bumpy back roads help participants grab big air in preparation for firing off one of the many rider tricks. You'll find that there is a science to the stop and start racing style as well. Perform well and new tracks and tricks will be unlocked. The game runs at a blisteringly high frame rate, impressively conveying the illusion of speed. The ups cancel out many of the downs.

Visually, this sucker follows suit. Hideous, shareware-esque menus belie the detail lurking below the surface. Grand indoor and outdoor scenes show off the game's visual prowess. A splendid panorama of colors greets the eye while engine sounds and rider grunts ring out clearly in the virtually tangible crisp, cool air.

If somebody didn't wear a cup, it's going to be messy.

Help! He's fallen, and he can't get up.

Follow the magic arrow to parts unknown.
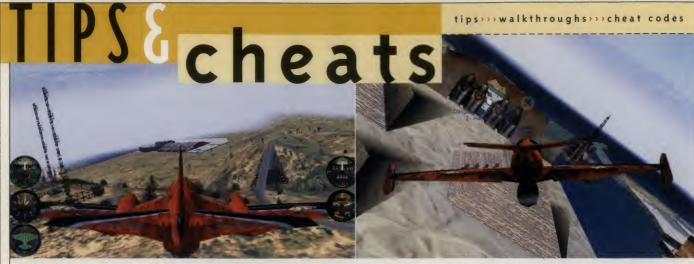
The name says it all.

Objects take on a cardboard cutout texture quality when scrutinized—the sort of thing that WizardWorks might use as environmental filler. Damned if you'll notice such details while zipping along at top speed, however, showing off for the crowd by removing your hands, arms, and legs from the bike.

The overall experience is very middle of the road. As a playful arcade game, this offering is betrayed by its simulation fetish. Nonetheless, the game's myriad play modes, open ended course layout, bone-breaking crashes, and stellar frame rates give it a new lease on life. While nobody's suggesting that *Motocross Mania* is running on empty, On Deck's flagship value-priced title could use a comprehensive tune up.

—Scott Steinberg

The Stolen Starlet: Get the jump on the grounded security hoplites by instantly attacking them on this runway.

The Nefarious Trap: Shoot out the wall over the slit in the Ramses Tomb obstacle for easier passage.

Crimson Skies

Tricks of the trade in the wild blue yonder

THE LATEST VOLUME TO BE FOUND IN THE PANDORA'S LIBRARY: A COLLABORATIVE effort produced by the brave pirates found therein! We humbly submit this work to you, Skipper, in hopes that you'll be pleased enough to finally let us win at poker. Thanks ever so much for having faith not only in our guns but also in our pens! You're the cat's pajamas, and we couldn't be happier to be Fortune Hunters. —*The Crew*

The Pirate's Duel: Explore the Cloud 9 Brothel first, as it is the easiest to navigate and the closest to the Pandora.
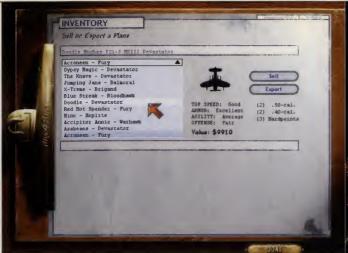
Part One: Staying Aloft

Hiya, Boss! I can't tell you how excited I am that you asked me to write this primer for new flyers. Take a look at what I've wrote so far, and let me know if there's anything I should add! (I took the liberty of forwarding this to that blonde fellow who just joined the Black Swans, in the hopes of swaying him to the Fortune Hunters— wink wink!) —Betty

Attack Quickly: The more wingmen you've got in the air, the better your chances. For this reason alone, you should never hesitate to plunge into a fight, even if you go in first and draw the fire of the incoming enemy fighters. If your plane is the only one in the air, you will find it very difficult to attach yourself to an enemy six (since all of them will be targeting you).

If your armor is in great shape, and you are approaching an enemy fighter wing head-on, it's almost always a good idea to simply take their incoming fire on the nose and give them the business in reply. Trying to swerve while you exchange gunfire is a bad idea—you still get hit, and very few of your shots land. If your plane is weak, you should dive below incoming fire and forget about firing back.

Most enemy fighter wings approach your position in formation. If you have the time to gain quite a bit of altitude before they arrive, you can often dive as they pass below you, thumping one of

INVENTORY
Sell or Export a Plane

Doodle Hughes P21-J MKIII Devastator

Acroneen - Fury ▲
Gypsy Magic - Devastator
The Knave - Devastator
Jumping Jane - Balmoral
X-Treme - Brigand
Blue Streak - Bloodhawk
Doodle - Devastator
Red Hot Spender - Fury
Minx - Hoplite
Accipiter Annie - Warhawk
Assbeans - Devastator
Acroneen - Fury

Sell
Export

TOP SPEED: Good   (2) .50-cal.
ARMOR: Excellent   (2) .40-cal.
AGILITY: Average   (3) Hardpoints
OFFENSE: Fair

Value: $9910

DONE

When you buy a plane, you can re-sell it for the same price; so feel free to experiment with different designs.

The Criminal Exodus: Before taking on each of the three blimps, wipe out their fighter escorts.

their planes while you swoop behind them. This leaves the enemy one fighter down, and you on their collective sixes.

If a wave of enemies includes an ace, the ace will often peel off and come right for you. In this case, you should focus your attention on the ace—more fame and glory, right boss?

Using the Spyglass: When two planes target each other in a dogfight, the results are pretty predictable. One plane may get on the other's tail, which often results in a kill—unless the plane in the lead is much faster, or its pilot pulls off a nice maneuver (more on this later). Sometimes the two planes will get locked into a repeating pattern, however, and it's good to know how to break out of the pattern successfully.

One common stalemate is the circle, where a pair of planes each bank sharply, turning toward the other, but fail to catch up. If you've got friends nearby and you outnumber the enemy, it is probably best to wait for one of your pals to come break the tie. If not, then you need to get out of the situation before one of your enemy's pals shreds your wings.

Simply banking in the other direction won't help. This will cause you to pass in front of the enemy for a moment, giving your opponent some chance of pulling out early and tailing you. Your best bet is to perform some tricky maneuver that gives you some chance of disorienting an opponent. Most of these tricks require some space between you and the ground, so circle slowly upwards if your altitude is low.

Let's talk about your spyglass. It's not just handy for keeping

track of where your opponent is—it can also tell you whether or not your opponent is already under fire. Knowing these things will help you guess what he or she might be about to do.

If you are banking sharply toward a targeted fighter, look at the spyglass to see what the target plane is up to. Say you are banking left and the target plane is heading to your right; in this case, you should ease back to a horizontal position as the target comes into view, lest the target simply rush past your view.

Furballs: When several planes representing both sides of a conflict are entangled in a dogfight, we call it a "furball." In such a state, it is often wise to quickly cycle through your possible targets, looking for the most convenient one. When an enemy fighter passes nearby and it's very likely that you'll be able to saddle up on him, turn and follow and re-target the new plane. A quick kill is better than settling a vendetta.
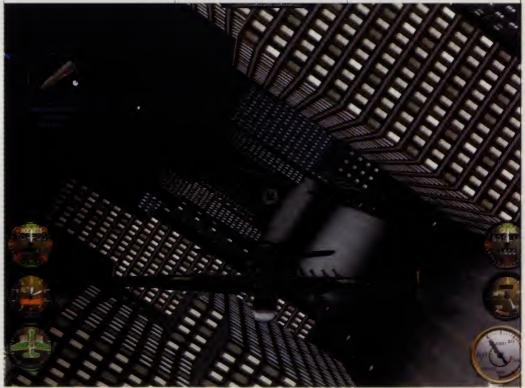
If you're fighting solo against two or more enemies, and you find yourself caught in a stalemate with your target, bug out and select a new target. You may catch a few bullets in the process, but at least

your target's comrades won't hunt you with impunity.
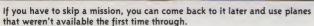
When you shoot an enemy plane, you will soon see flames burst from it. This indicates that the plane has lost its armor in that section (nose, tail, or wings). If you have equipped your plane with both armor piercing and dum-dum ammunition, switch from AP to dum-dum when you see those flames.

Hightailing It: Whenever you hear and feel your plane falling apart in a hail of bullets from astern, it's time to take significant action. Some of the same maneuvers that

Battle Over Broadway: You don't need to follow Miles under the streets; staying above the streets but near Miles will suffice.

If you have to skip a mission, you can come back to it later and use planes that weren't available the first time through.

Learn to use the "track target" feature to keep an eye on friend and foe alike.

get bogeys off your tail can be used to break stalemated dogfights, too.

Dropping the nose of your plane and hurtling toward earth gives you more benefits than just speed. Apart from zeps, the sky is free of sheltering obstacles. Down at ground level, it's much more likely that you will find tight spaces in which to disorient your opponent. Not only that, but it's far more difficult to detect a target which is racing along the ground than one which is in mid-air; airplanes are more naturally camouflaged when viewed from above.

It's not worthwhile to weave back and forth unless your enemy is directly behind you. Pick up all the speed you can and weave among obstacles, or suddenly bank one direction or the other. When an enemy is close behind, dropping your speed suddenly can cause the pursuing plane to overshoot you. At least you'll have a good chance of disorienting your pursuer.

Successful Rescues: As all pirates (at least the honest ones!) know, ground-dwellers often need to be rescued by us flyers. Whether we're scooping people off of mov-

ing trains and cars, or plucking them from the top of zeppelins, our rope ladders are our best friends. But there are a few things we all need to do before we can expect our pick-ups to leap for the lowest rung.

It goes without saying that we need to slow down so we don't pull their poor little arms off. About 150 miles per hour works best for the final approach. And of course we need to come in low enough so just a little hop will be enough for them to reach the ladder. But it's also crucial that you line up your approach from

behind whatever vehicle the pickup is standing on; coming in from the side or the front will not work.

The same goes for zep docking hooks. If you ever need to latch onto a hook, get in the zep's wake and come in from behind it. Either drift to the hook slowly, or, if the zep turrets are giving you whatfor, you can cut off the throttle just before you reach the hook and hope to slow down enough.

Cargo zeppelins sometimes back away from their docking hangars, so watch out! If a zep is backing up, you will still need to approach it from the stern in order to attach to its hook, even though the zep is moving in the opposite direction.

Part Two:
Planes and Weapons
Skipper, I've got those specs on planes and weapons you asked for (see attached). I added in a few thoughts of my own; I know I'm "just a zep pilot," but I practice a few hours each week in the fighters, and I want to know what you think of my ramblings. —Sparks

Constructing Planes: Keep this in mind: when you buy a plane, you can sell it back for the same amount of cash at any time. So if you want to tweak a plane you've designed, you can sell it at face value and reconstruct it for only the cost of any added parts or weapons. Want to trade in a pair of 30 caliber guns for a nitro engine or some additional armor? Just sell the plane you've been flying, and make the changes. Don't worry about losing cash!

Your choice of plane greatly depends on the mission you are facing. Most missions, however,

PLANE NAME: Wee   Form AC-4523   PLANE COST: $8615 $$$ on hand $102092

4) ADD GUNS

Outer Wing Guns
(2) Bruin Armaments .70-cal. "Goliath" ▼

Outer Wing Guns 2
(2) Sperry-Browning .30-cal. "Zephyr" ▲
— Sperry-Browning .30-cal. "Zephyr"
Carver Series II .40-cal.
Barret Arms .50-cal.
— Colt Industries .60-cal. "Cheyenne"
Bruin Armaments .70-cal. "Goliath"
(2) Sperry-Browning .30-cal. "Zephyr"
(2) Carver Series II .40-cal.
(2) Barret Arms .50-cal.
(2) Colt Industries .60-cal. "Cheyenne"
(2) Bruin Armaments .70-cal. "Goliath"
No Gun

AIRFRAME: Curtiss-Wright J2 Fury
WEIGHT CAPACITY: 7610 lbs.
CURRENT WEIGHT: 7030 lbs.
TOP SPEED: Good
AGILITY: Good
ARMOR: Average
OFFENSE: Fair

Airframe   Engine   Armor   Guns   Hardpoints   Paint

It's often wise to swap in a pair of guns for a nitro engine or more armor.

involve dogfights with enemy fighters. Fly a plane with equal or better agility than your foes; if this is not possible, go to the other extreme and select a heavily armored, turreted plane.

A plane's agility is hard-wired into its airframe. Thus, there is no way to take a cumbersome plane like the Warhawk and transform it into anything more nimble, even by removing all of its armor and weaponry.

The least agile planes (Balmoral, Firebrand, Kestrel, and Warhawk) are most useful when your foes are flying the most delicate and quick crafts—especially the Hoplite. Certain areas of the country, most notably Hollywood, use Hoplites as their security planes. A heavy plane, equipped with additional armor and turrets, is your best bet against these foes.

In most of your missions, you should equip a plane that has agility at least as great as the mission's most difficult enemies. If you are flying with all of your wingmen, you can get away with using a plane that gives up some agility for the sake of power.

Ranked by agility from least to most: Warhawk, Balmoral, Kestrel, Firebrand, Brigand, Hellhound, Devastator, Fury, Bloodhawk, Peacemaker, and Hoplite. If you are having trouble in a mission with a particular plane type, customize a plane that is near that type on this list (with the exception mentioned above).

Whatever airframe you select, you should equip it as closely to its maximum weight capacity as possible. Equipping a plane with less weaponry or armor than it can

Use your spyglass to determine if your target will soon shoot past your view.

hold will not give you any gain in speed or agility. The only equipment that influences speed is the plane's engine.

You should consider modifying the number of guns and hard points your plane carries, using the spare weight for a nitro engine and/or more armor. Some pilots favor the use of both armor piercing and dum-dum ammunition, but others prefer to save the weight of a heavy gun and transfer the use of that weight into defenses.

Using Turrets: If you have a plane equipped with rear turrets, learn to use them effectively. When you see a turret straining to aim at a target (the chase camera view works best for this), bank your plane in the opposite direction so that your turret can fire. This tactic is most useful when you fly past a ground target, like a turret truck or patrol boat, and you fail to destroy it. If you bank correctly, your turret will often take the target out for you.

In a dogfight, your turrets can discourage or even destroy opponents that are on your tail, so long as you bank so that the target is within the range of the turret. When you load out your planes for a mission, you'll need to select ammunition for your turrets; arguments can be made for each sort of ammo. If you are flying with little backup against multiple unhurt aircraft, load them with armor piercing ammo. If you have a group of wingmen with you, load your turrets with dum-dums.

Sometimes, in our more wealthy periods, crews of pirate ships like to take an afternoon to practice dogfighting skills. Every now and then we even take to the skies to joust against each other. If you take part in these matches, you may find that a pair of rear turrets really helps you excel. There's

Before taking on a zep's defenses, make sure its guardian fighters are no more.

If your armor's in good shape, take incoming fighters face to face.

nothing like a hail of bullets to shoo off hangers-on.

Equipping Your Wingmen: When we sit around the Pandora's lounge, we often talk about what planes and what equipment we like best. You might think we'd chat incessantly about guns and ammo, but the number one item on our common wish list is definitely armor. When we visit other zeps and talk to their pilots, we hear the same story.

If you can afford to design your own planes, create a plane for your wingman that provides as

much armor as possible. We'd appreciate a hard point or two, and at least one pair of guns, but we can easily get by with that bare minimum. If flak is available, load our hard points up with it; we are fine with slug ammo if our planes just have one gun pair. Max out the plane's armor with the weight you save, and we'll stick around for a lot longer.

Part Three: Spies in the Sky
Hiya, Skipper! I typed out that radio transmission you asked for. I have no idea how she contacted us from the set. I'll keep you advised

A turreted plane is the best way to handle enemy Hoplites (and crowded skies online).

To dock with a hook or to drop a ladder, you must slowly approach from behind the target.

of any further communications, and put them on your desk as they arrive. —Sparks

The Stolen Starlet (Hollywood): Here's one from the Black Swan—she seems to know a lot about what we're up to, skipper! —Sparks

Don't ask me how I snuck into Johnny Johnson's set, and I won't ask you what you could want with a tramp like Lana Cooper. Despite my wounded heart, I took the liberty of scouting the area on your behalf.

If you arrive during the filming, you might fool the director into thinking you are one of the stunt pilots. Fly a nimble plane—perhaps a Fury. If you complete three stunts in a row, you'll have free rein of studio airspace; that is, until you start damaging their property. The second stunt, through Ramses' Tomb, is quite easy if you shoot out the wall just above the opening.

But that isn't what I would do if I were you, Nathan. I would buy a Brigand, and to the devil with stunt flying. Equip your turret gun with armor piercing bullets, and your hard points with flak. Rather than following the stunt plane, immediately bank right and fly over the hill, looking for the airstrip on which four security Autogyros are parked. Slow down and let them have it with your sixties. You won't be able to target them at first, so aim carefully. When they take off, stick behind the lead pair and hit them with flak.

I imagine you will send Big John after Cooper, since you wouldn't want Jack's charm to woo her before you get your paws dirty. John will likely encounter a pair of roadblocks as he escapes; one flak rocket apiece is the easiest way to take them out, but do not worry about the roadblocks until the skies are clear of fighters. John is more patient then you'll ever be.

If you are worrying about mussing your hair before your dalliance with the film star, you can save her without shooting down any planes at all. Outfit a Fury with nitro engines, and simply avoid fights (except to remove gates and roadblocks). The enemy fighters will swarm foolishly around John. At the end, dip in among them to save your lover, and boost away to the Pandora.

The Nefarious Trap (Hollywood): This just came in from Show Stopper Crawford, Skipper! Take a gander at this juicy info. —Sparks

Greetings, Nathan. It seems that we will compete in Johnny Johnson's so-called race, but I have heard enough to know that it's all a show, and I plan to stop it.

Win if your ego requires it; but win or not, Johnson intends to sic the rest of the pilots on you once the race has ended. If you insist on winning, you may find the bridge and the Hollywood "O" somewhat daunting. The second obstacle is simple—just shoot out the wall above the slit. Only skill will allow you to pass through this other pair of challenges, however.

My advice to you is this: as you approach the bridge, slow down to half speed and bank 45 degrees to either side. Fly through at this angle and speed, tapping the controls gently to correct your trajectory. Approach the "O" in the same manner, though you will need to snap the wings to the vertical just as you pass through the opening.

Finally, as you leave the "O," bank right and come at the city street obstacle from the statue side. Fly just over the statue and bank almost vertical. Stay low to the street, and success will be yours.

As I said, many of the other pilots will turn on you after that. I suspect that the Black Swan may stay aloof, given your... sordid history with her, but you know what you can expect from the likes of Genghis Khan. Do not flee to the Pandora, for I intend to stay over the movie set and feed those ruffians some lead. Stay with me, and target Johnson first. If we work together, I know we will succeed.

The Pirate's Duel (Colorado): It's just you and me, darling. How long has it been? —Swan

When you told me to take the helm of the Pandora, I thought you were mad. When you said you were going after Ulysses Boothe alone, I thought you were crazy. When I remembered that you've always been both, I went to the pilothouse without comment.

But I have plenty to say now. Boothe could be lurking in any of the four hotspots. I'd start with the Cloud 9 Brothel. It's the easiest to fly through, and if you don't find Boothe, you can easily return to the Pandora if you are pursued. The Pandora not only provides covering fire, but also makes a nice obstacle that you can dodge behind in a fight. Boothe's boys fly Brigands, so you'll have to slow to two-thirds speed once you get on their tails.

Next, try Swift Jimmy's Bar, and

enter it over the railroad tracks; I suspect that the tough guys will approach the bar from over the water, and coming from this direction will give you a few moments to yourself. Fly to the Pandora or swing up to the mountaintop if you are attacked.

I plan to fly the Pandora past McCoy's Diner after I pass the bar, so head there next if you still haven't roused the villain from his playthings. The diner presents a tricky stunt, but if you line up your approach and take it slow, you should be fine. Save the Shangri-La Dance Hall for last, as examining it is tougher than beating Sparks at poker.

Once you've flushed out your prey, gun after him first. Shoot him down, and I'll fly out from the Pandora and help you with his lads. It should all go sparkling well, Nathan, and good luck.

Deceit at Devil's Horn (Colorado):
This just came in over the radio, all broken up. Here is the part I could understand. I believe that Big John spoke the words. —Swan

We've got a big problem here, Boss. We're trapped on a cargo zep, and it's wired with dynamite. I know you'll come to free us, but you're going to have to shoot us free and dock, no two ways about it! Problem is, the zep is nose-first into the dock—something to do with the dynamite, I suppose. When you shoot it free, it'll coast backwards out of the dock.

I only mention it because the zep will be moving backwards away from the dock, but you'll still have to come at it from behind. Just slow way down and approach the hook with your nose pointing at the zep's nose, and you'll be fine! Good luck, captain. Oh, one more thing! Don't... (*here the transmission ended*).

The Criminal Exodus (Manhattan):
Wow, Skipper, no clue who this guy is! I almost switched to a new frequency, but then realized that he might know something you're interested in. Anyhow, I'll let you decide! —Sparks

Hey, Butterball, ya couldn't beat a poor Cabbie like me on a simple chase through Manhattan's streets, and now ya wanna take on the biggest bunch of blimps this city's ever seen. Well, I feel bad for ya, I gotta admit it. So I done a little snooping around on your behalf. Naw, don't mention it.

There's three blimps, and each

one is guarded by a bunch of scums. If I was you, I'd load up a Devastator with a nitro engine, and trade in a set of guns for all the armor the frame can hold. Take along some armor piercing bullets and some dum-dums, and hit the fighters with the AP, switching to dum-dums when they smoke. Give your wingman the same kinda plane—full armor, all flak, but skip the nitro. Save your own HE and flak rockets for later; I think this story has a surprise ending.

Kill the fighters at each blimp before you try knocking down the zep's engines. Once the skies are clear, you'll have plenty of time to lazily circle the blimp. Use your dum-dums to poke its engines off. Repeat three times, clean the skies of scum, and I'll forgive ya the five you owe me.

Word on the street has it that a certain plane with a certain long wingspan has been sold and re-sold, ending up in the hands of aforementioned scum. Keep your eyes peeled for it, and take it down when you get the chance. It has four props on each wing, and ya gotta pinch at least half of them to have any chance of grounding the beast.

If fighters interrupt you, take the time to knock them off. The Goose ain't known for its speed. To bring the bird down, hit her props with everything you've got; hopefully you've saved all your flak and HE for this moment. Take her on from the front and sides if possible. Once she's airborne, you might find it easier to float along behind her, dropping, and then rising to hit the props with your guns from below.

Battle Over Broadway (Manhattan):
Another of your women, Skipper? Anyhow, she sounds pretty scared and desperate; that's why I tacked this one right to your door! —Sparks

Nathan, it's me, Lana Cooper! This creep Miles got his mitts on me and I've been carted here and there all over Manhattan. I just slipped away from my guards for a moment; I hope that I am operating this radio correctly.

Miles' ship Dante is scheduled to fly out this evening, but first he's got something nasty planned for the citizens below! Please, you must stop him. Even if you destroy his zeppelin, you might not have found him. He has something up his sleeve; for the past two nights, he's been bundling me into his plane and flying through and even under the streets! He says he's

Strive to ensure that you approach all targets from a comparatively higher altitude.

When you see bullets whizzing past, hightail it for the ground (you gain not only speed but camouflage).

practicing just in case. But just in case what? I think he is going to challenge you to a stunt duel.

His route is difficult to describe. At first, he flies above and below one or two of the city's elevated streets. You should be able to follow him simply by staying a bit behind him, and drifting along over the street. No need to actually go below the street at any time! Just keep him in front of you, nearby.

After the streets, he likes to zoom through the police building, and then perform a trio of tricks at the top of a partially constructed skyscraper. When he heads for the skyscraper, slow down as much as you can and line up your approaches carefully! Once he finishes with the skyscraper, he

heads back to the Dante. I think that's all he means to challenge you with!

Please, Nathan, you saved me once; you must do it again. Good luck to you, and be ready for anything from this creep. Don't leave his tail until I am safe, I beg you!

A Note from the Skipper: Gang, I can't thank you enough for the work you've done in putting together this guide. You saved my neck with these words as much as you've saved it with your guns. I will make sure that all new Fortune Hunters take a look at this, so that they can learn to fight as well as you mugs. Well done, and let's go give 'em heck! —*The Fortune Hunters (with Dave Perkins)*

Multiple production centers are a must for most races.

Assassins are one of the best heroes for "knocking off" powerful opponents.

Warlords Battlecry

Digging out the depth in this Warlord's Waterloo

WARLORDS BATTLECRY IS A GAME WITH A LOT OF DEPTH. NOT ONLY WILL YOU BE dealing with a large number of units, but also heroes, spells, economic finagling, and nine different playable races. Terrain will play an important role (as it rightly should), and the victory conditions for each given scenario have a significant impact. In a game with this kind of depth, you will have to consider each of these factors independently, but there are some tactics and hints that apply no matter what scenario or race you play.

General tactics

When playing against the computer, you will soon notice that it is much better than you are at thinking in parallel and in carrying out all parts of its game plan simultaneously. It can manage economy while questing with its hero and attack you on two fronts, all at once. Your trump card in these situations is the pause button (F12). This is especially critical while you are initially learning the nuances of fantasy death dealing. With a pause in the action you have some leisure time to consider your next move, much as you would in a turn-based game.

Of course you can't pause online, so if your goal is to become a multiplayer champion, you will need to get used to quick thinking and multitasking like a supercomputer. A little training with the user interface on some easy skirmishes will help beginners and experienced players alike to increase efficiency and speed. Occasionally use the command chart, and try hotkeys that you

have never used. Some will seem useless and others will make you wonder how you ever could play without them.

Regardless of your play style, learn to assign groups of units to the number keys. You will not be able to effectively control armies without this, and sometimes the AI will pick the worst target or maneuver your army near a tower or catapult with devastating consequences. Put your hero on one key to select him or her for spell casting; remember to make your hero "bug-out" when things get dangerous. Missile and siege units can evaporate when they come up against strong melee units, so you should assign them a specific key. A panic key, one that selects all the troops, is also a good idea in order to sound a general retreat or to target one powerful enemy unit or hero.

Make sure to experiment with attitude so that you understand how units will react in different situations. There is nothing more frustrating than losing units that

wander off into an enemy stronghold while pursuing a measly scout. When using aerial units as scouts, their attitude should be set to cowardly. This allows them to patrol without the need for constant babysitting.

Towers are very important in the early part of the game. Manning the towers, especially with infantry, can make a big difference in their effectiveness. Infantry causes towers to have a higher attack rating and to fire faster. Remember also that a hero in a tower is has the same effect as two infantry and two missile units.

Heroes, super!

There is a lot of variety in heroes, and the type of hero you play will depend a lot on your particular style. Nothing beats the archmage for pure power and versatility. You can also give him the spell immunity ability to boost his defense. Paladins reign supreme in conversion, which can be devastating when combined with the invisibility spell. Assassins are great in sce-

narios that involve killing other heroes; if given all abilities, assassins can kill a hero with one blow.
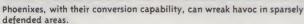
If you want to cut corners a bit to give your hero some great weapons, set up a scenario that you can easily win with a victory condition that you can stretch out. Try and maneuver the victory to the point at which your enemy is virtually destroyed. Now search for a mausoleum, shrine, or pyramid. Start completing quests until your hero is loaded down with weapons. Make sure to give any magic-using heroes some excellent spells. Spell combinations and specific spells in combination with related tactics can be devastating. For example, if you use a lot of archers, cast spells such as entangle, which will slow the enemy while your archers pepper them with arrows.

Economics 101

No matter what race you are playing or what hero type you have, if you pay little attention to resource gathering and building, you will be defeated. Skirmish starting positions usually have one mine of each type nearby. Converting more distant mines early is important, but don't be drawn into protracted battles to protect them. A token force is enough to discourage probing attacks, but heavily outnumbered forces should beat a hasty retreat back to the main camp. Be sure to man nearby mines with builders to increase

Phoenixes, with their conversion capability, can wreak havoc in sparsely defended areas.

This giant bat scouts ahead so that the main force won't be ambushed.

their output. Heroes should spend the beginning part of the game exclusively converting mines. Don't forget to upgrade your keep, as its level determines how many resources you can stockpile.

In *Age Of Empires*, building fortifications and defensive towers is very important to winning strategies. *Warlords: Battlecry* features walls and towers as well, but it is much more difficult to construct effective fortifications. It is very easy to end up with unintentional gaps in walls that can't be filled. Save the game before building walls to make sure that they end up blocking the enemy as intended. Place archers, siege engines and towers just in range of the walls to create a kill zone during attacks. Wall sections and towers are expensive, so be very careful where you choose to build them. Towers are a defensive structure but they can be used in an attack by constructing them near an enemy city.

The order of things

Early-game: If you have properly selected your starting units, you should have a builder and a flyer. Set the builder to work creating your palace so that your hero is free to convert your starting mines. The flyer should be put to work scouting out the immediate area. Send your hero out converting and build some production buildings. Don't put your hero on building detail early in the scenario, as she is much more effective when converting. Start manning nearby mines with builders as soon as possible. An early raid with the right units may tip the scale in your favor, but use caution based on your surveillance.

Mid-game: If all nearby mines are converted, have your hero complete a few quests. Good items and powerful allies can be decisive early in the game. Send your aerial scouts out to discover the enemy strongholds. Build

towers and maybe some walls to hold off attackers. Massed missile units can be effective in defense against flyers during this part of the game. Start buying improvements that tie in with your strategy. If you are playing defensively, concentrate on missile units, towers, and siege engines. This is a good time to raid enemy mines that are away from their stronghold. Offensive-minded players should consolidate any gains made by early rushes. Start building the forces for the final push.

End-game: Wait for an enemy attack. Try and repulse the attack with as few casualties as possible. Fall back into the range of your towers and temporarily man them with infantry to increase their damage and rate of fire. Use missile units to wear down the enemy. Once you repulse the attack and heal units, send out your main attack force for the final push. It is likely that you will catch your

opponent with only a few units. Beware of towers and catapults; their splash damage can decimate even the most carefully constructed force. If you have catapults, use their superior range to destroy enemy towers. If you only have melee units, pick those with the best defense and hit points and storm the towers. With towers out of the way, your hero can be used to convert large numbers of structures. This will increase greatly the number of units you can build. Concentrate on targets that fulfill victory conditions and ignore other targets.

Races

Humans: Pikemen are the basic infantry unit, and they are cheap and easy to build. Unfortunately, they are also fairly weak and fall easily to the more powerful infantry of the other races. The answer to this is masses of squires and healing. Build up archery improvements to flame arrows as
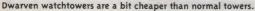
This undead hero has his statistics bolstered by numerous artifacts.

A melee battle can make picking specific units very difficult.

Dwarven watchtowers are a bit cheaper than normal towers.

Ancient wisps, the elves' best friend.

soon as possible, and create squires. When enemies attack, put the pikemen in front to slow the enemy forces. Deploy archers on the flanks at a fair distance to riddle enemy units. Healing wounded pikemen with hero or white wizard spells is a good way to conserve resources. Another essential part of the human strategy is use of eagles, the basic flying unit. Eagles have an extremely long detection range, so they make excellent scouts. Also, they are able to build structures, which leads to a very important strategy. Palaces can convert enemy buildings. If an eagle can build a palace near some enemy buildings, they can be converted. This is almost as good as having a phoenix. Human cavalry is a key unit for the mid-late game, and can provide the final punch that breaks the enemy's back.

Dwarves: This powerful race is best suited for defense because of its lack of speed and high armor upgrades. One excellent strategy

to help you survive the early game is to use walls, towers and missile units. When building fortifications, site selection is the most important factor. It is very easy to end up with holes in your walls when building next to hills or forests. Keep a few smiths handy to plug holes and build towers in key locations. Mines should be manned with the maximum number of smiths as they have the same effect as two builders from the other races. Siege engines become key in the mid game as more and more powerful units start to challenge the parapets. A half dozen ballistae are a very effective defensive force because of their extraordinary range. Few marauders will even make it to your walls with these on duty. Once your defensive perimeter is secure, you can wait for the endgame and use your superior resources to build a huge force of berserkers, dwarf lords, and maybe even a dragon or two.

Elves: All elf races share some

important characteristics. The first is that they are unable to put builders into mines, which gives them a significant disadvantage in resource gathering. This can be somewhat offset by the phoenix, which is the only flying unit that can convert. Most elf units have low hit points compared to their counterparts in the other races. Extracting wounded units from battles can help this problem as they also self-heal faster than units of other races. Wisps are the saviors of elvenkind—four wisps can be joined to form an ancient wisp, the best early defender for the elves. Keep up a steady stream of wisps and send them all to one place so they can meld. Having a separate tower that does nothing but pump out wisps is a good idea. Elves will most likely start out on the defensive and build up momentum later in the game.

High Elves: Fortifications are not as essential as they are with the dwarves, but they can help stem the tide in the mid-game when

you're fighting some pretty intense defensive battles against the faster developing races. Avoiding protracted battles is a key strategy, as your low number of unit-hit points will surely result in defeat if you allow yourself to be drawn into a slugfest. Fast healing capabilities will allow your units to live to fight another day that much sooner; try and exploit this advantage. When you are able to produce a fair number of dragon knights, send them out to raid enemy resources. Make sure to preserve this force so that they can heal for the final push. Build many phoenixes as soon as possible so that you can start converting enemy resources and buildings. If enemy heroes convert back their mines, just send the phoenixes back to do it again. If the enemy can be cut off from resources, the war will soon be over.

Wood Elves: The gladewarden, with all its upgrades, is the most formidable missile unit in the game. Like most other wood elf

This general is kept busy by using command queues.

A heavily defended stronghold.

The AI will exploit your mistakes, resulting in quick death and defeat.

Four Minotaur kings... otherwise known as "let's run!"

units, it has few hit points. Build a core of gladewardens and start making upgrades as soon as possible. Keep them near towers and other units that can help defend them. When you can build treants, use them to guard your weaker units. The treant entangle capability goes well with missile and magic attacks. Treants have the brute force necessary to demolish towers and other structures. Dryads are probably the weakest generals in the game, but they have a long-ranged magic attack and move quickly enough to escape danger. Don't let your dryads get trapped or ambushed, because they will not last long in a melee. Pixies and imps make good raiders that can be used to destroy enemy mines and exposed structures.

Dark Elves: Magic and missiles will keep you in the game and help you win in the end. The sorcerer can become dominant if you purchase all the upgrades. Use your sorcerer's offensive spells to cripple enemy attacks and bolster your own. Gravestones can produce skeletons near the enemy camps, and a steady stream of them will force your opponent to waste resources on defense while you work on bringing a serious force to bear. The assassin's ability to kill with one blow can be decisive if used properly. Do not waste assassins on small units; concentrate their attacks on only the most powerful opponents. An assassin taking down a Minotaur king can cost the enemy a battle. Summoning a daemon can also be a great boon, so build thralls and basic infantry as sacrifices. Spread the daemons out during an attack so they can cause more chaos.

Undead: Most undead units are

transformed from skeletons. This makes the undead one of the best races in the early game. Skeletons are cheap and move fairly fast. You can build a large mass of skeletons and send them on raids to devastate the enemy economy and buildings. Undead do not regenerate, but the transformation of skeletons comes with a nice advantage—any damage is fully healed after transformation. This means that you should try to transform undead units only after they have dealt and received some damage. Since transformations take resources, hoarding them for battles is extremely important. Zombies, the undead builders, can help in this by scavenging the dead for resources once the Feast of Garok improvement has been made. In addition, develop your keep so you can create darkness at will—the idea of undead armies sloshing through a stormy night is just too cool to pass up.

Barbarians: A challenge to play, the barbarians have very few real advantages other than the force of numbers. Build multiple ziggurats to produce gobs of thralls. Use these thralls to occupy mines and build multiple arenas. Try to hold out against early rushes from the more powerful races and you'll have a chance to overwhelm them later with sheer numbers. Don't attack until you gain unit improvements and the Jihad production boost from the altar. Keep replacements flowing through your arenas as fast as possible. If you reach your army limit, try to convert some enemy structures with your hero or send in some eagles to build ziggurats and arenas near the enemy camps. Raid enemy resources with air units to keep them guessing. Keep the

enemy reeling from multiple attacks and don't give them a chance to recover or pursue their plans. Making the opponent react to your game plan is essential in order to make your enemies flee before you.

Orcs: Orcs have powerful infantry units that can be very resistant to missile attacks... with the right upgrades. Use this to your advantage against races that depend on missile units. Your Achilles' heel is the fact that your structures cannot be repaired. You must defend them or watch them fall one by one to raiders. Wolfriders make excellent mobile guards, and a few basilisks or totems can tip the balance in your favor. Follow the principle of "the best defense is a good offense" and take the battle to the enemy as early as possible. Once you get ogres, trolls and giants, few will be able to match your power. The goblin shaman will frustrate your opponents with its powerful lightning spell. Cast it from a distance, as the shaman will not last long in melee combat. Orc huts are important when you get close to your unit limit, as each hut will allow you to build three more units. Don't forget about the harpy's drain mana

ability. It can really disrupt armies that rely on magic for healing.

Minotaurs: With only two unique units, Minotaurs seem to have few clear advantages. Closer inspection reveals that their basic infantry is one of the strongest, especially with all upgrades. There would seem to be a weakness for air attack, but this can be offset with the Star of Sartek skill, which gives all Minotaurs a missile attack, and the ability to build griffons, a very powerful air unit. Use griffons to defend your base and to raid deep into enemy territory to destroy mines and harass enemy units. Sheep will heal Minotaur units, but they are sometimes more bother than they are worth unless you can find them wandering in the wild. Herding sheep around during a battle is somewhat ridiculous, especially when you consider that sheep built by your corral count against your unit cap. Make good use of your basilisks, goblin shamans and catapults depending on which races you face. The Minotaur king is without peer in sheer power, and its ability to cause fear adds an extra boost in massed attacks. Build them soon; build them often. —Brett Berger

The undead on a rampage, how cute!

Ah, the smell of victory!

Opening the Crypt.

The Crystal activates this elevator in the Crypt.

Wizards & Warriors

Six characters in search of a sword: a guide to the Gael Serran

I AM KERAH, A WARRIOR SERAPHIM OF THE GAEL SERRAN, GUARDIAN OF THE TOMB of Lord Anephas who nobly sacrificed in order to imprison the incarnate Pharaoh of Evil, Lord Cet. However, now—thousands of years later—Cet awakens from slumber and threatens us once more. We need new champions to seek and wield the Mavin Sword and destroy Cet before he has the power to reign again.

In the village Inn of Valeia, create a priest, a rogue, two wizards, and two warriors—all with enough attribute points to train for the elite guilds. Put all your staring skill points into Sword for warriors and Traps&Locks for the rogue.

The following is a cheat to increase the party's gold supply: have the party leader pool gold before entering an Inn, and then have the second in line pool it inside before briefly removing the leader and restoring him to the party.

The Signet of Mavin
Jump down the broken stairs in the crypt and swim across the pool to Rethpian with a rat pie (a quest from Bilibump). Use the bauble stick to get the crystal near a locked gate in the pool. The crystal activates the elevator so you can kill F'lokis Ra and read the inscription on his gold locket.

Press the elevator button and jump on the elevator's roof to get to a secret level where stairs lead down to the statue of Kerah. Type the inscription on the locket for the statue to open the gate.

Use the crystal you get from the

Wizard Spirit to restore the right hand stairs in the room with the collapsing stairs. Climb up and take the figurine from the brazier. Place it in the right hand urn in the next room to open the door to the fire pits.

Carry a crate into the room and place it on the middle fire pit to keep the exit grate open.

Swim to the asylum, kill Scabban, throw the switch in his room, and jump through the hole in the floor. Dive down and swim through an underwater passage to the Tombs of Heroes. An underwater switch opens the gate to Rethpian's pool. The gold key underneath the switch opens the four Tombs, where you'll find the Signet of Mavin.

The west exit from town takes you to Nymph Lake. Swim up the river under the barrier into the Oracle cave in the north. The Oracles quest you to retrieve the Masque of Evil from Elyssia, in the Serpent Temple. Swim to the dock near Ishad N'ha.

Snakes 'R' Us
South of the Ishad dock is a dock near the Serpent Temple. Talk to

Kol the Heretic in front of the Temple to learn of a secret entrance and get a key.

Swim to the rear entrance, enter, and climb stairs to meet and kill Kreug. Use the key he drops to open the locked Holding Pens downstairs. An underwater passage under the Holding Pens leads to the Serpent Idol. Place the Idol in the Library niche to get the Book of the Servant.

Put a coin in the basket under the altar to get a Cone of Incense.

Collect four Monkey Idols. One is in a chest near the holding pens. Another is carried by one of the monkeys that swarm into the room with the square hole in the floor (the Monkey Room) when you flip a lever. The third is in a storeroom accessed from the kitchens by elevators. The fourth is behind the last of the six locked doors (pull levers and insert a coin to open each door).

Place the Idols in the four Library niches and ride an elevator up to Kreug's secret study to get the Serpent Wand (there is a fountain in the room that cures poison).

Near the Monkey Room is a keyhole at the bottom of a stairway. Use Kol's Key to open the path to talk to Kerah's statue.

Kill the Inquisitor in the Torture

Touch the Toadem to gain five permanent hit points.

The Snake Idol placed here gives access to the Book of the Servant.

Chambers to get the key to H'Thark's cell. Give H'Thark the lockpicks Gorthius gave you.

Turn the Death Wheel in the next room to elevate the crushing pad high enough for you to enter the doorway in the pit. Drop a spider egg in the pit and place an empty flask (found in the kitchen) under the tap in the back room. Crush the egg to make Spider Nectar.

Read the Book of the Servant and use the incense, nectar, and wand with the brazier in front of the giant snakehead to summon Xydussa's spirit. Answer her questions, enter the head, and kill her. Solve the maze, get a key from the Serpent Protector, and ride the large elevator up to Elyssia and retrieve the Masque of Death.

Is There a Demon in the House?

To get into Shurugeon Castle dive down and swim through the underwater passage of the west moat. Flip a switch and then swim up through the open hatch. Swim north and climb over the crumbled wall. Enter the Castle and get the Master Key hanging in the Kitchen to unlock the Armory. Shoot down the skeleton standing at the lever in the locked cage to unlock it.

The first element of evil is in the chest inside. Flip the eight gargoyle switches in the Vault Room to get the second. Ardibren gives you the third the second time you talk to him. Jump through the hole in the floor at the end of the cellblock and swim to the abandoned tower stairs and climb to the first landing where Lysandra lurks. Kill her or pick her pocket to get the fourth element. Swim a little further to a second set of stairs. They lead to DeSota and the fifth element.

Follow the path behind the Vault Room to snatch Ardibren's key. Use the crank with the mechanism in Ardibren's bedroom to open a secret room.

Kol's Key fits in this keyhole.

Elite Promotion Quests

Promotion Solution: **Barbarian** Kill 20 enemies. **Ranger** Take a River Raptor egg to a warrior's guild. Found along the river near the Toad Village. **Samurai** Take the Samurai Baton won by battle in the graveyard near the west end of the moat surrounding Shurugeon Castle. **Bard** Take the Scroll of Trickery from Kreug's secret study in the Serpent Temple to the Pawn Shop **Ninja** Flip the drawbridge switch in the second gate tower of Shurugeon Castle. **Paladin** Utter the prayer Sanctus Holy to the Altar in the woods behind the Gypsy House on the shore of Nymph Lake. **Warlock** Take a skull and a spider egg to a wizard's guild. **Monk** Spend two nights in the Wilderness without armor or weapons. **Assassin** Get Raskalion quest from Scanthril. In Stout Mines flip switches in both Mining Cart areas then flip the first Mining Cart area again. Then ride the second cart to kill Raskalion. Take the Assassin's Dagger Scanthril gives to Pawn Shop. **Valkyrie** A female must put G'Ezzerred's heart into the black flame, and then go to the Temple in Brimloch Roon. **Zenmaster** Whoever has all four tomes (earth, fire, etc.) while at the Bushi Dojo in Brimloch Roon will be offered the promotion.

Valeia Quests

(Note: Items often do not appear until after a quest taken) Giver Solution: **Town Hall** 1. Turn in five skulls for experience and gold. 2. Deliver a scroll to the Town Hall in Ishad N'ha. 3. Kill Juba Thobers, the troll, wandering around Nymph Lake **Armory** 1. Kill Mon The Sculz on the road to the graveyard. 2.Talk to the Toad Village Shaman (north end of Nymph Lake). 3. Retrieve the sword of Mastus from his tomb (one of the four Tombs of Heroes) **Temple** 1. Deliver a potion to Mekdawa who is near the Nymph Lake dock. 2. Donate 500 gold. 3. Find the Ring of Saints under the table in the hall above the Tomb of F'lokis Ra. **Magic Shoppe** 1. Scabban is in the Asylum. Kill him when you find him. 2. Kill Tevik Teporn (he hangs out on an island north of Ishad N'ha.) 3., Type "Orb of Clarity" when talking to the Nymph Lake gypsy, Haespia. She will ask for the Serpent Wand in exchange. **Gorthius** He's in the Southeast corner of the map and has lockpicks for H'Thark, imprisoned in the Serpent Temple **Bilibump** He's southeast of the graveyard and tells you how to open the crypt if you

deliver a rat pie to his brother inside. **Kerielle** Near the Millhouse on the shore of Nymph Lake, she will give a potion that knocks a Naga unconscious in exchange for the Algamesh amulet. You can always steal it back if you need it.

Shinwiki Rewards you with a spear and a bit of gold for destroying Scabban's Apprentices guarding the Toadem. Have each character touch the Toadem for a permanent bonus of five hit points.

Ishad N'ha Quests

Giver Solution: **Town Hall** 1. The Werewolf will not appear until after you find the burnt body near Stout Mines. 2. You need Dragon Armor to turn off the Beast of Bronze. 3. The Bandit King is between Dragonspire and Brimloch Roon. **Armory** 1. Gliebott appears in the barracks of Shurugeon Castle after fighting the Undead Blacksmith. 2.Deliver the letter to the guards in the Stout King's Throne Room. 3.Doshi-Gin is an Ettin who is found by using three wooden sticks to climb to the right hand corridor in Boogreville. Three different party members can use the lamp— once! Have your wizard ask for armor, your warriors for weapons. **Pawn Shop** 1. The priests in Serpent Temple drop coins. Bring ten of them to the Pawn Shop. 2. Ardibren's Journal is in a chest in his bedroom. 3. The Band of Boars can be found in a chest near the exit from Boogreville. 4. (For Assassins only) Grue Morde is between Dragonspire and Brimloch Roon. **Bushi Dojo** 1. Torin hangs out near Dragonspire. 2. Talk to Grunaxe's ghost in Boogreville. 3. Shrew Chisi is in one of the NW inlets of Boogre Lake (north of Ishad N'ha). **Magic Shoppe** 1. Ardibren's Relic is in his secret room (you need Ardibren's Key to open it). 2. You need S'keser Da's Evil Eye to open the path to The Idol of Aku (which also cures Boogerism when touched). 3. Kill the Colanth in the Dragonspire >>>

G'Ezerred Ra appears to be heartless.

PIGG

16

AL

11

PLRR

6

THUMBS

6

HEAVY

4

BLASTER

4

Blaster takes 1 poison damage
Blaster uses ?Potion?
Blaster is unpoisoned!
Pigg I sense a Serpent Priest nearby...

The Crushing Pit is where Snake Nectar is made.

pool for its eye). Temple 1. Xydussa is in the Serpent Temple. 2. Gallain's tattered fragments are in the servants' quarters of Shurugeon Castle. 3. Take a message to Jathil, who wanders the foothills northwest of Shurugeon Castle. Erzebette She has a house to the west of Ishad N'ha. Take her letter and drop it in the Dragonspire Depository. Scanthril Scanthril is outside of the burned out house north of Ishad N'ha. 1. Agent G is the burned corpse near the Stout Mines. 2 Kill Raskalion.

Brimloch Roon Quests
Giver Solution: Town Hall 1. Kill Ginelang, the Centaur, north of Brimloch Room, near the Living Tree. 2. Kill the three-head hydra in the pass to the Isle of Sands. Pawn Shop 1. Take Talrik his hook (he's on the beach by his ship, a short distance from Brimloch). 2. To prove the Leprechaun exists swim to the shore from Kerah's Shrine and bring back the Lucky Stone. Bushi Dojo 1. Kill the Darkened One, a guardian corrupted by Cet, inside the Shrine of

Anephas. 2. The Sword in the Stone is on an island in the Lost Sea. Magic Shoppe 1. Only the Staff of Death will open the door to Mada Mabbig's chamber in Skull Castle. 2. Bark Horrors inhabit the desert west of the Cet's Pyramid. They drop the seeds you need. 3. When you use the Staff of Death on the mystical barrier blocking the entrance to Anephas's Shrine, you've completed this quest. Temple 1. The Fountain of Isis is north of the Enchanted Isle. 2. The Ankh of Isis is in the Shrine of Anephas. 3. The Monk's Ward is an amulet found in Talrik's abandoned treasure next to his broken cart (as far west as you can sail). Armory 1. The centaur, Argothius, is immediately north of Brimloch. 2. In the pool with a collapsing bridge inside Skull Castle, swim through the SW channel. The Ettin has the shield. 3. Ramakamil is on the east coast of the Enchanted Isle. Sphynx The answer to the first riddle is Ice, Grave, or Shadow. Other answers may include Kerah and Anephas. Talrik Kill a Longtooth and bring him the hide to get a treasure map. ▪

Summoning the Spirit of Xydussa.

Inside is the lever that opens the ritual tower gate in the hall.

Place the Masque of Death and all five elements on their pedestals in the tower then use the Masque on Haleabus (in the locked Throne Room) and fight him.

After Haleabus has been sucked to hell, the spirit of DeSota appears and gives you the sacred word (Elseramavin) and the Shroud of Elsera.

Just Say the Sacred Word
Get the mining pass from the burned corpse (Agent G) near the Stout Mine entrance. The Stout King offers to fashion Dragon Armor for you if you bring the special ore he needs. Ride the mining car to the abandoned mines. Grab a pickaxe and find the second cart's missing lever (it looks like a pickaxe handle) Repair the broken cart and ride to the

area with a lava field. Use your axe to get the shiny ore for the King.

Enter Dragon Spire and turn off the switch behind the fire-spouting machine. Swim across the river to a tunnel that leads to a hand crank (you'll have to do some acrobatic climbing). Swim back across and walk the ledge up river to the waterfall. Swim through it. Climb the ladder and use the hand crank to extend a bridge. Search the other side to get two dragon-shield shards. Dive to the bottom of the pool to get the Divine Sigil from the Earth Oracle. The ring removes boulders blocking your path to the third shard (near where you found the hand crank).

Put the shards in the dragon-

shield on the wall to open the locked door. Say the sacred word to the dragon and give him the Shroud (click your mouse as you move into him). Take the Mavin Sword and exit to the other side of Dragon Spire.

Follow the Yellow Brick Road
Buy a ship in Brimloch Roon and sail it to nearby Skull Castle. Find the pool with a collapsing bridge. Swim underwater through the NW channel. The current sweeps you to a room where you can pocket the key that opens G'Ezerred Ra's chambers.

Swim to the Maze. One path leads to the elevator key. The other

Elyssia wears the Masque of Death.

The powerful Wizard of Oz—uh—Lord Cet!

collapsed passageway...
Touching the Divine Sigil of the Earth Oracle to the fallen boulder, you watch in wonder as the giant stone begins to move...

USE
Divine Sigil

Use   Give

The Sigil moves the boulders and reveals a chest containing the third shard.

takes you to the elevator. Flip the switch to stabilize the collapsing bridge. G'Ezerred, the tormented lich, offers to give you the Staff of Doom if you bring him a relic (an ankh) from the dungeon. He gives you the Dungeon Key.

Return to the pool and swim the SE channel to the Vampire's Lair. Accept Adrianna's quest, and swim underwater to a switch that opens a passage to the castle well.

Use the Dungeon Key to open a gate to a toggle-switch room controlling some of the four-way bridge segments. Pull all the switches and then jump from segment to platform to ledge to get to the other toggle-switch rooms and make three new areas available.

One has the chest holding the relic at the end of a bridge in a lava pit. Use the Stone spell, Lava

Walk, to get it or flip a nearby switch to stabilize the bridge. Give the relic to G'Ezerred in exchange for the Staff.

Sail to the beach that leads to the Shrine of Anephas. Use the Staff to open the temple.

Work your way to a chest with a baboon figurine. Place the figurine on the shelf in the room with monkey drawings to open the way to Anephas' ashes. Place his Ashes on the altar in the room with the guardian statues.

Move the guardians to unblock a passageway to a room with a pool. In one of the chests in the room there is a statue of Kerah. Place it on the nearby altar to activate the elevator in the pool. Hop on top of the elevator to get to Kerah's underwater temple. A portal in her temple will create an Obelisk of Light. Ride the elevator down and place the Obelisk on the sparkling pedestal. Then use the moveable reflectors to reflect a beam of light from the Obelisk to Anephas's Ashes. After talking to Anephas, leave the Shrine through its rear exit.

The Wizard of —uh— Cet!
Dive down in the middle of the far Western Ocean to find the sunken city but not without a scuba mask and tank for each party member (turn in crab shells to the yardmaster in Brimloch Room for them).

Enter the largest of the buildings through a side entrance and search for Sarellia, a mermaid. She opens a floor grate and gives you a glowstone.

The first of the three tablets you need is in the Library. The second is at the end of a passage under a Crab Cage. Use glowstones to open the exits from the rotating room. The northern exit leads to the third tablet.

Go to Cet's Pyramid and place the tablets in their wall sockets to open the door.

Fill an empty flask with holy water from the pool you find inside. Charge the Mavin Sword and Staff of Doom with the black flame. Collect two Champion Keys.

Touch the Isis Portal to bring on the first confrontation with Cet— and Kerah! Give her the holy water when she asks for it. Go to the lava pit and use the two Champion Keys on the two locks in the door to meet Cet a second time.

Congratulations, my Champions! You have saved the Gael Serran from the Lord of Death!
—Andy Backer

BLASTER

VIEW MAP

FIGHT
Staff of corals

Heavy   On my way...
Heavy   Giant Conch Shell taken...
Blaster casts Stone to flesh
The spell fizzles!

This is the entrance to the Sunken City.

No One Lives Forever

While playing the game, press ‹T› and enter the following codes:
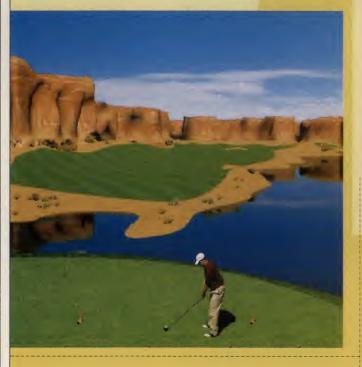
MPIMYOURFATHER God Mode
MPWEGOTDEATHSTAR Infinite Ammo
MPKINGOFTEHMONSTARS All Weapon/Unlimited Ammo
MPMAPHOLE Complete Mission
MPDRDENTZ Full Health
MPWONDERBRA Full Armor
MPYOULOOKLIKEYOUNEEDAMONKEY All Armor Options
MPGOATTECH All Weapon Upgrades
MPMIKED Exit Game
MPBUILD Show Version
MPASSCAM Third-Person View
MPROSEBUD Spawn Snowtruck
MPPOS Toggle Position Display

Links 2001

When playing the game, press the Caps Lock key and type in the following codes:

HITMANIA Power Swing
LIGHTER Lighter Golf Balls

Delta Force: Land Warrior

While in the game, press ‹~› and type in the following codes:

DRURY Full Ammo
KARIYA Unlimited Ammo
ROY God Mode
CORBET Invisibility
DOMI Artillery Strikes

Star Trek: New Worlds

To access all of the game's missions for any of the three races, go to the directory where the game was installed and edit the "GAME.INI" file with Notepad. (You might want to back it up before starting the edit process.) Change the following lines:

FedLevel=1   **to:**   FedLevel=100
KliLevel=2   **to:**   KliLevel=200
RomLevel=3   **to:**   RomLevel=300
TauLevel=4   **to:**   TauLevel=400
MetLevel=5   **to:**   MetLevel=500
HubLevel=6   **to:**   HubLevel=600

Blair Witch Project 2: Coffin Rock

While in the game, hit the ‹F10› key and type the following cheats:

GODGAMES God Mode
WINBLOWS All Weapons
AUTOAIM Auto-Aim Weapons
SKELETONKEY Get Skeleton Key
MOREAMMO Get More Ammo
GOREMODE Gratuitous Dismemberment

Star Trek Deep Space Nine: The Fallen

During the game, press ‹TAB› and type the following codes:

SET PLYR.DS9_[NAME] HEALTH 9999 Infinite Health
SET PLYR.DS9_[NAME] JUMPZ 1000 Increase Jump Height
SET PLYR.DS9_FLASHLIGHT CHARGE 9999 Long-lasting Energy Beacon
SAVEGAME Quick Save
EXIT Quick Exit

For [NAME] above, substitute SISKO, SISKOEVA (if he's in a suit), KIRA, KIRAEVA, KIRACARD, WORF or WORFEVA.

Yes, this wizard looks like a bug.

The gods speak...

Persephone lays down the law.

Sacrifice

Combat in a world of magical weirdness

The premise of *Sacrifice* is simple: one to four players control powerful wizards, armies of creatures, and utilize a myriad of spells and incantations to wreak havoc across a very strange 3D landscape. With vast worlds of clearly viewed terrain, multiple landscape

Your "troops."

THE GOODS

GENRE 3D Action

PUBLISHER Interplay

REQUIREMENTS Pentium II 300, 64MB RAM, 3D Accelerator

INSTALL SIZE 100MB

designs, unlimited camera angles, and over 50 different kinds of fantastic creatures at your command, Sacrifice is—at the very least—arresting in its visual splendour and bizarre design. It truly has that unique Shiny "look" (remember *MDK*? *Earthworm Jim*?)

As players control their wizard and battle up to four other wizards you are witnessed to landscapes that are vast, floating islands, and whose composition and architecture are defined by the *Five Gods* themselves. The wizards can cast spells to summon creatures to fight for them or simply opt to destroy their opponents and their creatures using attack magic in the form of over 50 different spells. It is even possible to cast spells that harness the elements to alter the landscape or the weather system, plunging your opponents into a newly created canyon, or blasting them with a bolt of highly charged lightning. The only rule is that if your Altar (your home base) is destroyed, then your game is over.

Those who are expecting a team (or squad) based action-oriented game like *Tribes* with spells will be a bit disappointed, as the wizard you control doesn't really do all that much in the way of direct combat. That's not to say you aren't busy flinging spells—there are minions to summon, enemy souls to convert, mana fountains to claim, and lots more. The key to the game is in commanding your troops, though.

It's a lot like *Battlezone*, but with an emphasis squarely on the best parts. It's real-time, and you're down there in the trenches with the units you command, but you mostly just make other things do your bidding.

Interestingly, you don't really gather resources or build structures in the classic sense. Each creature that dies produces a soul, and it's necessary to collect these to make new ones. Thus, the total enemy count doesn't really get out of hand and matches don't last forever. Likewise, the mana fountains that dot the landscape can be "claimed" by placing a structure over them, but they produce infinite mana resources for the enemy as well as yourself. Thus, a typical game of *Sacrifice* isn't a struggle to quickly build an army and demolish your enemy, but rather a constant struggle over finite resources (souls and mana fountains).

The single-player game is a campaign in which you slowly earn new spells over time, and each level presents unique challenges. You don't just play multiplayer skirmishes against the computer AI. That's pretty standard for real-time strategy games, but in *Sacrifice* you can often choose which of the *Five Gods* you want to help on the next level, adding some nice variety and replayability. The demo gives you a series of tutorials to get you acclimatized to the game's look and play. A single scenario is offered to test out your skills. Have fun... ▨

This guy is not a friend.

Metal Gear Solid
Call me...Snake. Solid Snake

For many video gamers *Metal Gear Solid* was the epitome of a great PlayStation title. Perhaps the greatest. With tactical gameplay that emphasized stealth over Rambo style bravado, great cinematic style, and an intriguing plot, *Metal Gear Solid* introduced a more "adult" themed gameplay to thousands of console gamers. Now it comes to the land of the PC and the translation seems worthy of its heralded greatness—much more so than many previous console to PC ports.

But what's it about? the console-challenged masses ask. Glad you asked... It seems that there's a group of baddies, all former members of FOXHOUND (a special forces group that specializes in anti-terrorist operations), that has taken control of a nuclear weapons disposal facility in Alaska. They're not doing this to promote the conservation of the fragile Alaskan ecology, or civil rights for indigenous peoples, or saving the caribou—no, they're power drunk with nukes at their fingers and want to see the government dance to the music of their naked greed. So who do you call when Steven Seagal isn't handy? Solid Snake, of course. Snake is an ex-special forces operative, the founder of FOXHOUND in fact, and he is sent into the facility to rescue hostages and take away the bad guys' fissionable toys. Armed with only a pair of binoculars, a genetic implant, and a

Solid Snake: a sneaky devil.

pack of smokes (don't ask, just play the game), Snake has to evade, exterminate, and explore—carefully—the many obstacles that are thrown his way. And you get to see it all from the top-down, with the option to go mano a mano in a special PC only first person perspective. It's fun. It's filled with stealthy tension. Try it. The demo features action until the DARPA chief shoot out and the liberation of Meryl—two important plot-related events in the game.

THE GOODS

GENRE 3D Action

PUBLISHER Microsoft

REQUIREMENTS Pentium II 233, 32MB RAM, 3D Accelerator

INSTALL SIZE 48.09MB

KEY COMMANDS

X First person view
Cntrl Weapon
W Switch weapon
Shift Crawl
Num 4 Left
Num 6 Right
Num 8 Up
Num 2 Down
Esc Menu/Pause

Solid Snake still sneaking.

Cossacks– European Wars

Continental squabbling with bullets and cannons

Cossacks is a historical real-time strategy based on events of the 16th-18th centuries in Europe when nations and states rose and fell against a backdrop of religious and political turmoil, advances in weaponry, and colonial imperatives. Think *Age of Empires III* (or at least the time period it should logically cover) and you'll get the idea. It was a time when new regulations and tactics were developed in professional armies, and the art of command was polished to perfection. The result was a series of vicious (and not a few petty) wars that devastated the European landscape.

While the game follows the usual real-time route of building structures and resource management, it also allows the player to have an overview of historical battle events on a large scale. Epic battles of up to 8000 units may be engaged on single or network game maps. The game also contains a great deal of historical data, and the full version will include an in-

The mighty square approaches.

depth encyclopedia about the various wars, battles, nations, technologies, armies, and units that ravaged Europe during these centuries.

The game represents more than 85 large-scale wars and battles of the 16th-18th centuries for single game and multiplayer. The most noteworthy being: Thirty Years War (1618-1648), the English Civil War, the English and Dutch wars, the War for Spanish Succession, the Northern War, the War for Austrian Succession, the Seven Years War, the Ukrainian independence war (1648-1657), and sea wars against pirates.

The demo gives you a good look at the graphics (structures are quite nice) and an introduction to its brand of resource and military management on a random map.

It was a time of mass formations.

THE GOODS

GENRE Strategy

PUBLISHER Strategy First

REQUIREMENTS Pentium 200, 32MB RAM

INSTALL SIZE 46.38MB

Zeus: Master of Olympus

Whom the gods would toy with...

Zeus is Impressions Games newest city-building game (following *Pharaoh* and its expansion *Cleopatra*). The new title moves the setting to the classical environs of ancient Greece, where mortals were at the whim of the gods and magical beasts terrorized the countryside. Impressions has gone for a quasi-historical (or is that quasi-mythological) approach, with more or less realistic economic, geographic and military models sharing space with purely mythological elements. For instance, you can herd sheep, grow olives, and build fountains, but you can also pray to Ares...and have him come down from Olympus and help you smite your enemies.

All these creatures and gods make for a game with a very different feel from Impressions' earlier titles. It's more lighthearted, as the designer's notes in the manual explain, and it just feels less constrained than either *Pharaoh* or any of the *Caesars*. Partly that's because in *Zeus* there's no one king or emperor looking over your shoulder. True, you have the Olympians here and there but given

the right time and opportunity, even these capricious gods can be defied.

You get seven themed adventures, ranging from the founding of Thebes to the Trojan and Peloponnesian Wars, plus three free-play scenarios, with economic, military or must "sandbox" focuses. The demo lets players take control of a Greek city while Perseus is away rescuing Andromeda from the Kraken.

THE GOODS

GENRE Strategy

PUBLISHER Sierra

REQUIREMENTS Pentium 166, 32MB RAM

INSTALL SIZE 46MB

A burgeoning Greek town.
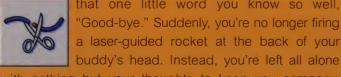
This is prime Kraken territory.

Check us out on the CD in this magazine.

When you're online, you know how frustrating it is to get disconne

DISCONNECTED AGAIN. ENOUGH ALREADY.

There you are happily gaming online when you hear that one little word you know so well, "Good-bye." Suddenly, you're no longer firing a laser-guided rocket at the back of your buddy's head. Instead, you're left all alone with nothing but your thoughts to keep you company. And one thought in particular keeps popping up.

WHO DISCONNECTED ME AND WHERE DO THEY LIVE?

How are you going to get back at your Internet service provider for ending your session just when you were starting to have fun? A million interesting ideas run through your head but you won't settle for anything less than the "pièce de résistance." Ahhh...you've got it. It's time to take action. It's time to make a call.

HELLO, EARTHLINK.

If you're tired of your ISP disconnecting you, why not return the favor and call EarthLink? You'll find we have what you've been looking for in an Internet service provider all along. Like over 5000 local access numbers in the United States to help you get connected. And a Fast Lane Internet monitor that automatically alerts us if you're having a problem with your connection. So pick up the phone, call your ISP and in a polite but soulless voice say, "Good-bye." Then call us at 1-800-EARTHLINK or visit us at earthlink.net. Because it's *your* Internet.

EarthLink

EarthLink An Internet Partnership **Sprint**

Rune
Holding off Ragnarok

Though the game is set in Scandinavia of the 10th century, Viking mythology plays a cosmetic role here, so don't expect the Poetic and Prose Eddas. You play a young Viking named Ragnar, a wild oat-sowing youth from the village of Wotankeld who has just become a warrior. Wotankeld guards several Runestones of Odin, which in turn guard the world by holding off Ragnarok—the end of the world. You can pretty much guess that those Runestones will feature heavily in the storyline. Despite the richness of the source material, the game's story is basically a thin suit of clothes (very chilly in the Northern Lands) that is wrapped around what is a more or less an ordinary dungeon crawl with lots of hacking and slashing. An evil Viking, Conrack, has made a deal with Loki to destroy the Runestones and bring about Ragnarok so that Loki can escape Odin's prison. It's up to

Ragnar to stop him. Fortunately Ragnar has the help of Odin—though why the mighty Odin needs this whelps help is a mystery—and that's exactly what you end up doing. And it's done in the most pedestrian and cheerless manner. The overall tone and color scheme is dark. Dark tunnels. Dark caverns. Dark lands. The thing needs a lot more graphical variety to offset the visual depression that ensues.

Check out this early level to exercise your need to make others bleed....

"Come get some," Viking style.

Combat, up close and too personal.

Dramatic Entrance 101

THE GOODS
GENRE 3D Action
PUBLISHER Gathering of Developers
REQUIREMENTS Pentium II 300, 64MB RAM, 3D Accelerator
INSTALL SIZE 86MB

Severance: Blade of Darkness

THE GOODS
GENRE 3D Action
PUBLISHER Codemasters
REQUIREMENTS PII350, 64MB RAM, 3D Accelerator
INSTAL SIZE 102.21MB

Graphic violence and heroic quests come together in this 3D action fantasy game. Hack off an opponent's limb and used it to help bash the poor guy into the netherworld. Sound cool? Try out the demo, where you have to escape from a dungeon and find the evil Ragnar.

Sheep

THE GOODS
GENRE Action
PUBLISHER Empire Interactive
REQUIREMENTS P166, 32MB RAM, 3D Accelerator
INSTAL SIZE 19.79MB

Yes, it's about sheep. Good ol' Ovis aries. But wait, they're actually intelligent aliens who have forgotten their superior status and become the animals we know today. It's your job to reunite them with their cosmic ancestors. The demo gives you a single level of herding action. Baaa!

Virtual Pool 3

THE GOODS

GENRE Sports

PUBLISHER Interplay

REQUIREMENTS Pentium 166, 32MB RAM, Windows 98, Me, 2000

INSTALL SIZE 19.32MB

It's pool. Billiards. Rack'em up, crack some balls, and go head-to-head against Jeanette Lee. Done in nice 3D, this demo features a game of 4-ball with all the ambience of a "nice" biker bar. ▪

4x4 Evolution

THE GOODS

GENRE Driving

PUBLISHER Gath. of Developers

REQUIREMENTS P233, 32MB RAM, 3D Accelerator

INSTALL SIZE 33.9MB

Drive your Explorers and Xterras wherever you like. It's not off-road, it's create your own road. Play against Mac and Dreamcast owners online. In the demo you only have the Nissan Xterra, the Nissan Pathfinder, and two tracks. ▪

Pacific Warriors

THE GOODS

GENRE Action

PUBLISHER Virgin Interactive

REQUIREMENTS P133, 32MB RAM, 3D Accelerator

INSTALL SIZE 49.29MB

Jump into this 3D action flying game set in the Pacific during a generic feeling WWII. Take your plane up (third person view only) and destroy wave after wave of enemy planes, enemy harbor sites, and... enemy ships. Pure mindless fun. ▪

FIFA 2001

THE GOODS

GENRE Sports

PUBLISHER EA Sports

REQUIREMENTS P166, 32MB RAM, 3D Accelerator

INSTAL SIZE 19.79MB

It's called football every place in the world except for the U.S. It's also the most popular sport in the world except for the U.S. Check out this good-looking demo and see some fast and furious "football" action. The demo features Manchester United vs. Arsenal. ▪

Gender Specificity

Where men are men and women are nebulous
by Cindy Yans

Ever since I lambasted Her Interactive's *McKenzie and Co.* for including in its game box some detailed instructions for applying mascara, I swore I wouldn't touch this topic again with a ten-foot tube of Maybelline Luscious Coral. Being a woman gamer in a sea of testosterone (yes, yes, I *know* there are plenty of estrogen bays and rivulets), it seemed to me that conclusions about women gamers *by* women gamers have been drawn, redrawn, and drawn again. I figured that to continue to visit the issue would be somewhat masturbatory. Well, maybe so, but I've been good, and I have Nair for my palms just in case.

Her Interactive's website states, "HerInteractive.com's first title, *McKenzie & Co.*, [circa 1995] was one of the first games designed specifically for girls seeking fun and challenging games with female characters and non-violent action." The challenge of this particular game is to take the role of one of several high school girls and to choose the "correct" series of actions in order to make a particular boy like you. There were a few Boy CDs from which to choose the one you wanted to attract, and there was subsequently an add-on pack of extra boys ("Strap-on Boys," if you will). But wait! There were other redeeming elements—like fashion! And shopping! Pretty scary stuff. Activision's *Teen Digital Diva II* (a sure indication that *Teen Digital Diva I* must have done exceptionally well) invites teens to "Reflect on the Inner You With a Cosmic Journal" and offers extensive makeover possibilities. In a similar vein, Girl Games offered *Let's Talk About Me*, another deep journey into the psyche of the teenage girl.

After its success with *McKenzie*, Her Interactive turned its sights toward more intellectual (?) pursuits with *The Vampire Diaries*, an adventure title with few role-playing elements, and finally toward its Simon &

Schuster *Nancy Drew* license. The two *Nancy Drew* mystery adventures have been quite successful, and at this writing, a third is on the way. Recently, one of *Her Interactive*'s Public Relations representatives contacted me to talk about reviewing the newest *Nancy* game, *Message in a Haunted Mansion*. She also posed the following: "The president of Her Interactive would like to become more visible in the gaming community by participating on panels at E3 [the yearly international electronic entertainment exposition] and the Game Developers Conference. In your opinion, what do you

Gender-specificity has always been a foreign concept to me when it comes to gaming...

think are the hot topics these days as far as adventure gaming goes; creating games for girls, creating 'gender specific' games, etc." Gender-specificity has always been a foreign concept to me when it comes to gaming—well almost foreign.

Much as I hate to admit it, I do recognize that men and women are different animals (although not in a Mars-y and Venus-y defined way) and *tend* (with lots of exceptions) to prefer different types of games. Girls who are aimed from an early age toward more "intellectual pursuits" seem to prefer more "male oriented" products than those who are not. By male oriented, I am talking primarily about action games—mostly shooters, driving games, war games, some strategy titles (if you haven't bought *Age of Empires: The Conquerers*, do it today!). But girls who are more left brained seem to do better with adventure and role-playing games, and many prefer "classic" things like solitaire and

mahjongg. Why? Companies like Purple Moon, Her Interactive, Girl Games, and others who are trying to target the girl-market will have a hard time pinpointing just what it is that will attract girls, because the tastes seem to be a result *not* of gender per se, but background, literary interests, learning strengths, the type of reasoning at which they are best, among many other things.

While Barbie products have sold through the roof, most of the Barbie customers are unlikely to become true "girl gamers," because a fad or childhood trend does not nurture the competi-

tive spirit that is at the base of most gamers of any gender. The *types* of competition among game genres may be different, but the spirit of competition is always at the core, and it's hard to harness exactly what builds that.

From a survey on Girl Games, "There are 18 Million girls ages 10-19 in the United States; teen girls spend more than $67 Billion of disposable income annually; brand awareness and lifelong brand affinity is created in a girl's early teen years. The girl consumer's sphere of influence extends beyond her gender and generation." What they are buying now has a lot to do with what we *think* we should sell them—*Barbie*, *Digital Diva*, etc. I prescribe a good dose of training in literature-love, science and math appreciation, and the garnering of reasoning skills. Maybe then the confidence to compete will overcome the need to buy nail polish. Then again, maybe nail polish is what really cinches equality [scratches her palms]. ∎

Cry Uncle

In search of a good beating
by Tom Chick

I used to pay to get my ass kicked. I shoveled quarters into tiny slots by the pocketful. I was spanked over and over until I didn't have any more quarters left. *Asteroids* overwhelmed me. *Smack.* Thankyousir maylhaveanother. *Centipedes* devoured me. *Smack.* Thankyousir maylhaveanother. *Space Invader* mashed me and presumably went on to conquer the Earth. *Smack.* Thankyousir maylhaveanother. I never did reach those mountains on the *Battlezone* horizon. *Smack.* Thankyousirmaylhaveanother. Those little flopping kind of bow tie things that spit sparkly asterisks and flip up out of the tubes and whatnot in *Tempest* kept flipping up and out and grabbing me and pulling me in. That one's kind of hard to explain. You had to be there. *Smack.* Thankyousirmaylhaveanother.

I never won. I never expected to. I put money into machines knowing they were going to beat me. Defeat was never a matter of "if" but "when." My goal was to stave it off long enough to get a high score and enter my initials, which only lasted until whenever the janitor unplugged the machines to vacuum behind them. It was eminently existential and

In Planescape Torment, you can't die.

It was eminently existential and even a little masochistic. I was a Sisyphus chained to a Ms. Pac Man.

even a little masochistic. I was a Sisyphus chained to a *Ms. Pac-Man.*

It worked this way because video games made their money a little at a time. If they let me win, I'd take the rest of my quarters and do something else with them. Back then, defeat was an economic necessity. But today, I hand over all my quarters at once and take the game home. It's gotten all the money it's going to get from me, so it doesn't need to beat me.

Inevitable victory

Now victory is as inevitable as defeat used to be. It's not a matter of "if" but "when." I just ride it out until the closing cinematic cutscene. My greatest accomplishment is having the patience to hang around long enough for my preordained victory. I am a Sisyphus who rolls the stone to level ten, puts a chock under it, and moves on.

Defeat has been winnowed out of the design process for a number of reasons. It's not only better for our self-image, but it's easier for developers. You don't need a good AI if you're just going to let the player win. You also don't have to worry about frustrating the casual player. Better to disappoint the hardcore gamer than alienate the guy who might not otherwise buy games. Developers eschew defeat because they think losing is no fun. They're partly right. Always losing is no fun.

But always winning is also no fun. What's fun is the suspense of whether you'll win or lose, the tension of uncertainty and the possibility of defeat. Too many games promise only victory. I want to lose again. I miss my beatings. I want my spankings back.

I'm not just talking about cranking up skill levels and giving computer players a resource bonus. I'm talking about weaving meaningful loss into the fabric of a game. For instance, death is a minor inconvenience in most roleplaying games. In *Diablo*, death is a quick ride to town. If a character dies in any other RPG, you merely reload. At worst, you might have to pony up the cash for a resurrection. Everyone's a Lazarus and there's a Jesus-for-hire in every town. Death, where is thy sting?

The RPG effect

In the seminal ACSII RPG *Nethack*, death was a permanent affliction. But now we have *Planescape Torment*, in which the game's very fiction supposes a character who can't die. It's a logical and clever extension of the phasing out of defeat. *Baldur's Gate II* brings to PCs the sort of pre-scripted character losses the *Final Fantasy* series offered console owners. Of course, you needed a PC to experience gaming's greatest scripted deaths: Floyd's sacrifice in *Planetfall.* I want more of that.

But the problem in RPGs is that it's a dra-

matic setback to lose a character you've spent so long leveling up. After a certain point, it's simply not viable to fill a party slot with a first level character. There's nothing more horrible than lost levels (far more fearsome than any dragon is an experience-draining wight). But losing experienced characters might not be such an awful setback if higher-level character replacements were available as the game progressed. Developers could scale the difficulty to allow for casualties. I wouldn't even mind Draconian measures to crack down on the save/reload shuffle if I knew a game was built and balanced for dying.

The diluted impact of death is a huge problem in first-person shooters, where success is ensured if you save at every corner. Saved games used to be for when you were ready to stop playing for the night. Now they're morning-after pills for death. This allows developers to stretch out playing time by contriving cheap challenges like ambushes when you're low on ammo, instant death traps, and jumping puzzles. Saved games are the jumping off points from which you beat your head against brick walls.

I personally approve of the concept of no in-game saves. It is one of the best ways to bring the agony of defeat back into computer gaming. But it is a difficult concept to implement. In 1994, LucasArts' *Dark Forces* had no in-game saves. If you died, you had to replay the entire level. This was all good and well early on in the game, but the later more difficult levels were agonizing nail biters, especially when you heard the foreboding clank of a nearby Dark Trooper. There was nothing inherently terrible about the Dark Troopers, which actually looked kind of goofy, but the lack of in-game save gave them their teeth.

The old days
But 1994 was closer to the days when we paid video games to beat us. Five years later there was a groundswell of outrage when Rebellion created *Aliens vs. Predator* without an ingame save. It was cruel and sadistic. The levels were looooong. The difficulty levels were steep. Death came quickly for fleshy pink humans and aliens with frail eggshell exoskeletons. The agony of defeat was constant and crushing. Eventually, Rebellion patched their game to be more like everyone else's, but they had killed the viability of making a first-person shooter without an in-game save.

I'm happy to see the concept slowly, almost imperceptibly creeping back. In *Rainbow Six*, you cannot save during a mission. This heightens the tension of the single-player game. In fact, since there is no respawning, it work in multiplayer games too. The lasting appeal of the game's engine has less to do with its technology and more to do with a sly design that appreciates the compelling power of defeat breathing down your neck. Io Interactive is striving for something similar in *Hitman: Codename 47*, which also has no in-game saves. But their long and sometimes tedious levels don't lend themselves to continuous replays.

Here's the tricky part: some people want ingame saves because they can't play for long

Dark Forces: The first (and one of the only) Iron Man first-person shooters.

Hitman keeps the spirit of no in-game saves alive, but the levels are too tedious.

stretches at a time. A good developer knows how to offer choices. *Soldier of Fortune* gives you a number of saves based on the difficulty level you choose. That game's greatest accomplishment isn't the graphic splendor of a knife to the crotch, but Raven Software's willingness to accommodate a range of playing styles. You can also see this in games that have an "Iron Man" mode, which I like only partly because it makes me sound like I'm in a triathlon.

I am Iron Man
I first heard of Iron Man as a way to play *X-COM*. Quite simply, it means there are no reloads allowed. When your lieutenant takes a plasma bolt through the head right outside the Skyranger door, you deal with it. Death is final and the game must go on. Played this way, *X-COM* is a superlative RPG and it's entirely possible you'll lose and the earth will be conquered.

Since then, I've seen games with built-in Iron Man modes. It's one thing to say you'll never reload, but it's another thing to have it

enforced by the game—it's the difference between merely locking the liquor cabinet and asking someone else to keep the key. In *Alpha Centauri*, you get a score bonus for playing in Iron Man mode and in *Warlords: Battlecry*, your hero gets double experience points. *Diablo II* has a hardcore mode in which your character is deleted if he dies, but you have to beat the game to unlock this mode.

These are things that bring the possibility of defeat back into computer games. The loser is a great American motif: Rocky, Huckleberry Finn, Charlies Chaplin and Brown, Al Pacino in *Dog Day Afternoon*, Robert E. Lee, Owen Wilson in *Bottle Rocket*, Mark Borchardt. Defeat is, in fact, one of the hallmarks of Western history, which was cobbled from three or four millennia of conquered Jews, executed messiahs, and Dark Age-afflicted civilizations. It's time for computer games to embrace it again, because I cannot go back to video arcades for my beatings—I need the quarters for laundry. ■

Lurching Toward Alpha

Underage drinking and other interesting bugs
by Phil Steinmeyer

After 19 months of development, I finally played my first game of *Tropico* last week. For about 20 minutes anyways, until a host of bugs forced me to take a timeout, apply some pesticide, and try again. After a couple days of alternating playtesting with bug killing, I finally had a moderately stable, moderately playable demo. And it was good.

Of course, everyone here at PopTop has been playing with the game since we first started. We've also been giving nice demos to the press for over eight months. But press demos are designed primarily to show off the game's concept and graphics, and our earlier playtesting was limited to individual slices of the gameplay—we never had enough assembled to test the game as a whole.

The last major demo build of the game was

> *Every boy is handsome in his parents' eyes. As a proud papa, I was hoping the new kid, Tropico, would make as favorable of an impression on our visitors...*

produced for ECTS (a European trade show) three months ago, and really wasn't playable for any length of time. We actually make an internal build of the game about once a week. However, this build is more to test the latest feature we've added, or to allow the artists to see the art they've just created working in the

game. We probably add 3-5 major features per week to the game, and we test them all to ensure that they work at the time we add them. Unfortunately, the new features often break older features in subtle ways. (Sort of like every new version of Windows has nice new features, but often break compatibility with older hardware and software). To build a nice demo for the outside world or for internal game-testing, each older feature must be re-tested and fixed. Eager to add new features rather than re-test old ones, we had been dragging our feet about making a major build ever since ECTS.

Sellin' it
Last week, we could delay no longer. On Thursday, a senior VIP with our new corporate owner, Take 2, was flying in to check out their new acquisition. On Friday, a writer for a major German magazine was flying in to do an in-depth preview—the magazine had already done a concept piece a few months ago, and we had to show this guy some meaty gameplay. Finally, we planned to put this demo on CD and send it out to different sales and marketing folks within Take 2 to get them excited about the game, so that they'd push it hard (yes, we have to sell it inside the company as well as outside).

As I struggled to pull together a solid build, some of the problems I saw weren't game-stoppers, but had to change regardless:

Six-year-old children bellied up to the local bar for a drink. (Whoops, add age restriction code to certain buildings.)

I'll eventually learn how to play my own game properly.

Virtually none of the women in the game were getting married. (A bug in the immigration logic caused mostly women to come to the island, resulting in a handful of very happy men, and a large number of unmarried, frustrated women.)

People were starving to death after a few years, despite abundant food. (When they visited the marketplace, their internal "food-on-hand" variable wasn't getting replenished.)

After a couple days, I worked through the most important bugs and had a chance to play an uninterrupted game for over an hour. I'm not a very good dictator... yet. My peasants toiled away at their sugar plantations and logging camps, making lots of money for me, but I let them live in tin-shanties with no entertainment, churches or health care. My people rapidly broke into full rebellion, throwing rocks at my palace and the few loyalists who defended me.

This is where it's good to be a programmer. Until I could get the game balanced well enough that I could stave off open rebellion, I coded an override for the rebellion system, to force the people to stay peaceful. With the new patch in place, I was able to keep playing the game, despite some sullenness on the part of my people. I finally built a bar and a church (both remained completely full for the remainder of the game—some sort of moral stand-off, I think). I managed to build some better housing (a rather nasty tenement building, which is still better than a tin shack, though). Most importantly, I was enjoying myself—the core gameplay worked, and was a lot of fun.

My days as a factory manager
When we worked out the basic concept and gameplay mechanics, I was worried that the game might be too dull. In particular, we had decided not to let the players exercise direct control over units. To get more workers for your factory, you can't just lasso them up and click on the factory, you have to lure workers in by raising the pay at the factory and perhaps building some nice houses adjacent to it. It's a more realistic representation of real-life power than most games use, but it's also a bit more abstract. If the player isn't spending all his time micro-managing his units, what does he do?

Based on the first few days of serious playtesting, there is plenty to do and keep the player engaged and amused. Before long, I had about 20 major buildings, plus 50 or more shacks, and over 150 citizens scurrying about. I spent my time adjusting pay and other factors at existing buildings, planning and constructing new buildings, and just watching my people go about their days. And I had turned off much of the political side of the game by turning off rebellions.

Every boy is handsome in his parents' eyes. As a proud papa, I was hoping the new kid, *Tropico*, would make as favorable of an impression on our visitors...

A visit from HQ
The Thursday of the visit was a miserable day in St. Louis, overcast and raining the whole day. We wanted to impress the visiting Take 2 VIP (a former corporate lawyer, and the guy I negotiated with in selling PopTop), with the fact that

My bustling island paradise.

[right] Who thought randomly generated names could be problematic in Germay?

Tropico was a good game, and that we were a well run and efficient company.

Efficiency (read *cheapness*) was the easiest to prove. The dismal day made our modest industrial park offices look particularly dingy (low office expenses). Our office cleaning person had quit three months earlier, and a quarter-inch layer of dust sat on most surfaces (*really low* office expenses). For the big power lunch, we hopped into my old Nissan with 105,000 miles on it for a ride to the local fast food joint (I doubt the VIP had been in anything south of a Mercedes in months...)

The *Tropico* demo, by contrast, was intended to look lavish, and build corporate support for the game. I knew things were going well as the demo continued for over an hour, endangering his chances of catching his return flight to New York. Anything that would convince a New York lawyer to risk an extended stay in a St. Louis downpour had to be good. The demo, and the visit, wrapped up with excited talk about an aggressive sales and marketing push, plus the inevitable "make sure it makes our fiscal quarter." Successful demo—mission accomplished.

Some German names are better than others
Friday loomed as a possibly tougher demo, to an outside German journalist who I had never met. Although the population of Germany is only about a third of the United States, his magazine has a circulation comparable to the highest American computer game magazines, with even higher production values [*Hey! —ed*]. Moreover, games similar to *Tropico*, including *The Settlers* and *Anno 1602*, have sold over half a million copies each in the German market alone, far exceeding their American sales. The German market looms as large as, or larger than, the American market for this game.

The demo was going quite well. German strategy

gamers love deep games, and the ability to drill down for minute details about people, buildings and even cows made a favorable impression. For the *coup-de-gras*, I started to show him the tourism sub-game, complete with tourists from all major countries, including Germany.

Unfortunately, the German tourist I clicked on happened to have the last name of Rommel (a famous German World War II general). World War II references apparently don't go over very well in Germany. I had put Rommel into a list of possible last names the game draws upon for Germans, mainly because I was struggling to come up with distinctly German names the day I was filling in the names list. With the journalist looking on, I dropped out of the demo, loaded up the source code for the game, and pulled up the section with the lists of possible names. To my relief, I had no other famous Nazis on the list. Rommel was replaced with Schmidt, a couple misspellings were pointed out and fixed, and finally, much to the delight of my interviewer, I added his last name to the list of possibilities. (It never hurts to be nice to journalists.)

SimCity, not SimCopter
Tropico still has four months of development to go. While we're hoping it's the next *SimCity* or *RollerCoaster Tycoon*, it could be the next *SimCopter* or *Pizza Tycoon*. But at least we can now see, play, and show others a near-alpha of the game roughly as it was envisioned, and we're happy with it. Hopefully, we'll still be happy four months from now.... ■

REbound

Violence and Gaming

A father speaks
As the father of a one-month old boy, Steve Bauman's editorial in the December 2000 issue ["We Blew It"] compelled me to write my first communication to a gaming magazine. First, let me applaud the magazine for confronting the issue of unregulated violence in computer games. I have enjoyed the hobby for a decade, playing everything from *Harpoon* to *Duke Nukem* and *Soldier of Fortune*, dutifully upgrading my computer to keep pace with game technology, to the tune of several thousand dollars every couple of years. There is no more interesting and engrossing pastime at my income level than computer games. I also believe that the last thing the industry needs is Federal intervention. It will probably throttle the creative process, and in the end, I, the gamer, will surely receive less bang for my buck.

However, if there is even the slightest chance that this powerful and compelling medium might inhibit, in any way, my child's ability to look at his peers with benevolent friendship, then I say, bring on the Feds. Let the heavy hand of legislation, censorship, whatever unsavory brake they end up applying, fall on the heads of people who refuse to wake up and smell the coffee.

I acknowledge and accept my responsibility for doing all I can to raise my child with good values. Unfortunately, that is not enough to protect him. It will be physically impossible, even if I wished, to monitor his movements 24/7. Sooner or later, he will wander by the mall computer store, see an ad on TV, or visit a buddy's house and blunder into those powerful sounds and images.

This is a team effort, folks, and we all have a key role to play. Of course, the bottom line in all this is corporate greed. It may ultimately be up to the shareholders to insist on practical, effective limits, and put the value of our precious, irreplaceable offspring, ahead of the mighty dollar.

Russell Lee

Disingenuous
Among all my gaming peers, I've often felt like the proverbial lone voice crying out that game designers and publishers are being disingenuous and unwise about the violent content of games. It's great to see someone making an intelligent and articulate statement on the matter from within the gaming community, and very publicly at that.

Scott Osborne

Parental responsibility
Time and time again I have read how computer games and the companies who make the games are guilty of how society is today. My point of view is different. I blame the parents. Why? They are the ones that have to supervise the kids. They are the ones that buy the computer or video consoles for the kids, they are the ones that supply the money to buy the games their kids play.

I am a parent and a gamer and I don't let my kids play the games I play. When parents hear the word "game," they have a false sense of security. They have to ask, "What game is that?" When a kid asks a parent for a game, the parent should check the game before it's purchased. They should read the rating on the box.

Stores are also to blame. If my kid asks me for money to buy a magazine, he can't run and buy an issue of *Playboy*—the store would not sell that magazine to a kid. With games, they sell games to kids even when the ratings say "Mature." It's all about money, selling games and making profits. Parents use computers and consoles as babysitters, and stores use kids to pull money out of your pocket. Stores know that 97% of the parents will buy the game the kid wants, solely so the kid will stop asking for it.

Anyway computer games were originally made for adults, not kids. In the early days, only working adults could afford a computer. While it's true many kids have access to a computer these days, it is still the responsibility of the adults to supervise them. Stores also have to stop selling "mature" rated games to kids.

You can't blame kids for wanting what they can't get—that's what make them kids.

Walter Ramirez

History of violence
The topic of debating what effect violent media has on children is something I find annoying and pointless. In the editorial "We Blew It," Mr. Bauman stated, "There is no precedence in history for the deluge of violent imagery faced by children today." What about the Civil War, the American Revolution, the Spanish Inquisition, the Salem Witch Trials, the Black Plague, three Holy Wars, World War I and its sequel... the list is pretty much endless. I suppose not one child happened to glance over and see all of the real death, plague, war and pestilence.

I'm not saying that it's not possible that videogames, TV and music couldn't set some psycho off. But hell, "The Catcher in the Rye" caused one of them to kill John Lennon, and nobody rushed out to try to get that book banned because of it. [*Actually, they already tried to ban that book in the 1950s —ed*]

My point is this there has always been a lot violence in this world to be seen, probably always will be. These people... these kids all had some serious problems, sometimes it's the parents, others it's the kids around them, but for the most of them we'll never know what exactly set them off.

But we have to take more steps towards looking after the mental health and happiness of our children, then assigning blame to the easiest scapegoat.

J. Marshall

No one would deny that people have been exposed to horrors throughout history; however, there wasn't much media beaming the Spanish Inquisition into every living room 24/7. —ed

Games as art

While your editorial "We Blew It" was well informed, and I agree with most of your factual statements, I disagree with your conclusions. I do believe that games like *Half-Life* that tell a real story are entitled to First Amendment protection. Most computer magazines censor the advertising that they accept in any case. [*Only in rare instances when the content is truly extreme. —ed*]

The point that I really would like you to consider is this—if we let the government chill our First Amendment rights, they automatically win! Where is the downside of fighting for these rights? If we only make *Tetris* clones to keep the government happy, what have we won? If we go to court and lose we can still make *Tetris* clones. If we pick a game like *Half-Life* or *Deus Ex* that does tell a story we may win in court.

The comic book industry created the comics code and the result was 25 years of bland junk because they were afraid of censorship. When a few brave souls made comics in violation of the code, the market responded and freedom won out.

If you have any readers who are attorneys for the American Civil Liberties Union, I would be interested in their opinion. Keep up the good work.

Kjas Long

Gore is good

How many letters have you posted complaining about gore? I have been a long time reader of your magazine and am constantly amazed at all the blood gore, and language in games. People take this too seriously. Not only did I not mind the gore in *Half-Life* (the art of hacking a dead body to pieces) but I (and *all* others I know) found it humorous.

This is getting really, really, annoying. Blood is not necessarily a bad thing, not at all adults think it is bad for their children, but children do not mind. Blowing

people's heads off is fun! There are some things I have come to realize: cussing in a game means it's got to be good, this works almost as well with gore, but not so much. I am not saying that swearing or violence is the source of goodness, just that it is like a "Stamp of Approval." [*But you said cussing means it's got to be good…*] In the review of *Aliens Versus Predator* (this also appears in others), you say that biting off heads with the alien is "not for the kiddies." You should definitely eliminate that kind of talk.

Oh yes, did I mention I am eleven years old? Now you are thinking "oh, one kid doesn't find this stuff offensive" but I can promise you that I am speaking for pretty much all of those "kiddies" out there.

Phil Neumann

We fear you. —ed

Finally, quality Trek

Just a line or two to say that I never played first-person shooters until today, when I got *Stark Trek Voyager—Elite force.* And it rocks! They finally did it right. Most Trekkies had about given up on a decent *Star Trek* game.

Joseph Swyertek III

Itanium correction

In the Hardware FAQs section of the December 2000 issue, Jason Cross makes the comment that "…Itanium is an entirely different architecture, and won't run x86 code. It requires a full 64-bit operating system and custom-compiled 64-bit applications."

Unfortunately, this is incorrect. In fact, the IA-64 architecture (of which Itanium is the first physical implementation) supports the execution of x86 instructions in hardware by placing the processor in a special x86 mode. All x86 instructions, including Pentium III SSE instructions, are included, and all x86 modes (real, protected, and VM86) are also included. Thus,

Itanium could run an unmodified x86 operating system. Of course, this mode switching incurs a large amount of overhead, so you really won't want to go so far as to run an x86 operating system on a regular basis.

If you'd like supporting information for my claims, you could check out Intel's website (in particular, for a quick fix, check http://developer.intel.com/design/ia-64/microarch_ovw/sld020.htm A quick note: the old architecture is referred to as IA-32 on most of Intel's pages.)

Adam Russell

Dune mistake

You have a great magazine and all, and the reviews and stuff are really well written, but… you people spelled "Muad'dib" as "Maud'dib" which was pretty noticeable to any *Dune* fan.

Andy Tilton

Sorry, we were having Bea Arthur flashbacks. It happens. —ed

Cindy invasion

It started innocuously enough. Cindy Yans, a great writer with a nice sense of humor was brought on board. Then, her alter ego Cindy Vanous appeared out of nowhere, to take center stage and confuse the readers. Now, quietly, through the back pages, Cindy Kyser Morgan is making her way into readers' hearts [*"A New Elder Scrolls,"* CGM 122].

And I say, what the hell? Is this some kind of alien invasion? Or perhaps some eccentricity of the management that allows hiring only girls named Cindy?

Eyal Teler

It's true, we only hire women named Cindy. —ed

Men of few words

The Sidewinder Strategic Commander [CGM 121] looks nothing like a hamburger.

Tukka Yoot

If you look at it from the perspective of being Cindy Vanous, it looks like a hamburger. —ed

Don't dumb down

First and foremost, I apologize for the AOL account. The gnomes in my head do odd and weird things sometimes…erm uh…now on to my comment. Don't dumb the magazine down…young people read the magazine they probably are looking for a mature approach to gaming.. er…something like that. When I read Tyraels rebound thingy [CGM 121] it made me so mad that I set my drunken violent alcoholic cat (Chocolate) on fire, it took seven clowns to put him out! If I saw him in person I would go "Ed is the editor you stupidass." Please don't let stupid people put things in the rebound (But make an exception for me!).

If anyone from BioWare reads this, "I buy all your games and have some pretty cool ideas!"

Tim "I hate AOL" Johnson

Useful criticism

Damn you carny bastards and pastry-based fiends. I could take a bunch of burritos and send them into a tornado of chicken dung and make better reading material than this quality lacking powder cheese crap! You also need to write more about how much Spam is best served with Jell-O. I oughtta throw bologna at your house; maybe that will inspire you.

I have a question, why is it that the lawn gnomes always smile at you?

MysticalMonkies

Bathroom fun

Not only is your publication a fine bathroom read, it doesn't burn my thighs the way my laptop does when I'm sitting on the toilet.

Perhaps you could include a moist towelette along with the free CD, so that my enjoyment would be complete!

DblDamage

COMPUTER GAMES: ACTION

Title	Release	Price	Title	Release	Price	Title	Release	Price	Title	Release	Price
Abomination	10/99	$26.95	Giants	11/00	$42.95	Rainbow Six:Covrt Op Esstls	10/00	$29.95	Starsiege: Tribes	12/98	$17.95
Airfix Dogfighter	11/00	$29.95	Gunman Chronicles	12/00	$34.95	Return to Castle Wlfstn	02/01	$39.95	System Shock 2	08/99	$14.95
Alien vs. Predator Gmrs Ed	04/00	$28.95	Half Life Adrenaline PK	01/00	$39.95	Rogue Spear	10/99	$34.95	Tachyon: The Fringe	04/00	$28.95
Amen: The Awakening	04/00	$39.99	Half Life Oppsing Frc	11/99	$19.95	Rogue Spear Expansion	04/00	$19.95	The Mummy	11/00	$29.95
Bang! - Gunship Elite	08/00	$34.95	Half Life Team Fort2	04/00	$44.95	Rogue Spear Platinum	03/00	$29.95	Thief 2 Gold	02/00	$29.95
Battlezone	03/98	$9.95	Half-Life Counter Strike	11/00	$28.95	Rollcage 2	07/00	$34.95	Thief 2: The Metal Age	03/00	$28.95
Battlezone 2	12/99	$24.95	Half-Life Platinum	11/00	$59.95	Rune	11/00	$38.95	Thief Gold: Dark Projct	11/99	$24.95
Battlezone Gold	09/99	$22.95	Halo	06/01	$44.95	S.W.A.T. 3:Elite Edition	10/00	$39.95	Tomb Raider	11/96	$7.95
Beach Head 2000	06/00	$18.95	Heavy Gear	11/97	$12.95	SWAT Career Pack	04/00	$34.95	Tomb Raider 2 Gold	06/99	$17.95
Blade of Darkness	02/01	$39.95	Heavy Gear 2	06/99	$14.95	Sanity	09/00	$39.95	Tomb Raider 3	11/98	$16.95
Blood 2	12/98	$17.95	Hidden & Dangerous 2	01/00	$38.95	Soldier of Fortune Gold	10/00	$29.95	Tomb Raider 4	12/99	$28.95
Carmageddon 2	11/98	$18.95	Hitman: Codename 47	11/00	$29.95	Spec Ops 2	11/99	$24.95	Tomb Raider 5	11/00	$38.95
Carmageddon TDR 2000	09/00	$39.95	Jazz Jackrabbit 2	09/98	$18.95	Spec Ops:Ranger Gold	11/99	$27.95	Tomb2/Total Bundle	10/99	$14.95
Code Name Eagle	04/00	$19.95	Kingpin: Life Crime	07/99	$24.95						
Crimson Skies	09/00	$44.95	Kiss Psych Crcs Ntm Ch	07/00	$29.95						
DF 2 Jedi Knight wSith	09/98	$24.95	Loose Cannon	01/00	$42.95						
Daikatana	05/00	$28.95	MDK 2	06/00	$24.95						
Deep Raider	11/00	$44.95	Martian Gothic	05/00	$9.95						
Delta Force	10/98	$12.95	Max Payne	05/01	$44.95						
Delta Force 2	11/99	$34.95	Messiah	03/00	$34.95						
Delta Force:Land Warrior	11/00	$39.95	Midtown Madness 2	10/00	$39.95						
Descent 3	06/99	$12.95	Mob Rule	08/99	$34.95						
Descent 3 Mercenary	11/99	$17.95	Mortyr	12/99	$32.95						
Deus Ex II	04/00	$33.95	No Code	11/00	$28.95	Speco Ops Platinum	09/00	$28.95	Unreal 2	04/00	$38.95
Die by the Sword	03/98	$9.95	No One Lives Forever	11/00	$34.95	Star Trek Away Team	02/01	$39.95	Unreal Gold Bundle	09/00	$9.95
Dogs of War	07/00	$24.95	O.D.T.	11/98	$9.95	Star Trek Hidden Evil	12/99	$12.95	Unreal Tournament	11/99	$26.95
Dominion Wars	05/01	$42.95	Oni	01/01	$44.95	Star Trk DS9 Fallen	11/00	$38.95	Unreal Tournament GYE	11/00	$29.95
Doom 2 W95	06/96	$9.95	Outlaws J/C W95	04/97	$9.95	Star Trk Vygr Elite Frc	09/00	$37.95	Urban Chaos	12/99	$24.95
Drakan	08/99	$15.95	Planet of the Apes	01/01	$39.95	Starlancer	05/00	$29.95	WW 11 G.I.	05/99	$19.99
Driver	10/99	$19.95	Project:Eden	02/01	$38.95	Starship Troopers	10/00	$39.95	Wolfenstein 3D	03/98	$12.95
Duke Nukem East West	10/00	$39.95	Quake	11/96	$12.95	Starsiege Tribes 2	12/00	$42.95	X Com Collection	11/99	$28.95
Evil Dead:Hail to the King	12/00	$39.95	Quake II	12/97	$18.95						
Evolva	06/00	$29.95	Quake III Arena	12/99	$33.95						
Fallout Tactics:BoS	02/01	$42.95	Quake III Arena MP1	12/00	$28.95						
Freedom:First Resistance	12/00	$39.95	Rainbow 6 Collection	12/00	$59.95						
Fur Fighters	11/00	$39.95	Rainbow Six Collector's Ed	12/00	$59.95						
Gamefest: Redneck Classic	10/00	$14.95	Rainbow Six Gold	06/99	$24.95						

COMPUTER GAMES: SIMULATION

Title	Release	Price	Title	Release	Price	Title	Release	Price	Title	Release	Price
1943 Euro Air War	11/98	$18.95	Flying Corps Gold	02/98	$12.95	MS FS 98 Dang Airport	02/99	$19.95	Racing Madness Bundle	12/00	$44.95
AMA Superbike	09/99	$19.95	Flying Nightmares 2	06/00	$35.95	MS FS 98 Flight Bag	07/99	$28.95	RallyMasters	10/00	$29.95
Aces Collection 2	05/97	$18.95	Ford Racing	11/00	$18.95	MS Flight Sim 2000	10/99	$38.95	ReVolt	09/99	$24.95
Across the Rhine	08/95	$9.95	GorkaMorka	05/00	$39.99	MS Flight Sim 2000 PE	10/99	$59.95	Red Baron 2	12/97	$8.95
Air Warrior 2	02/97	$9.95	Grand Prix 500	03/00	$24.95	MechWarrior 2 NetMech	11/00	$9.95	Red Baron 3D	11/98	$16.95
Airport 1	05/00	$28.95	Grand Prix Legends	10/98	$18.95	MechWarrior 3	06/99	$18.95	SU-27 Flanker 2	11/99	$36.95
Apache	08/95	$7.95	Gunship!	04/00	$38.95	MechWarrior 4	11/00	$44.95	Sand Warriors	09/97	$17.95
Apache Havoc	04/99	$12.95	Harley Davidson:Whls Frdm	11/00	$19.95	Mechwarrior 2 NetMech	07/96	$12.95	Search & Rescue 2	10/00	$39.95
Apollo 18	03/99	$35.95	Independence War	09/98	$12.95	Mig Alley	12/99	$34.95	Silent Hunter 2	03/01	$39.95
AquaNox	11/00	$35.95	Independence War 2	12/00	$42.95	Mobil 1 Rally Champ	03/00	$27.95	Star Trek Bridge Commdr	04/00	$44.95
Armored Fist 2	10/97	$12.95	Independence War Dlx	08/99	$17.95	Motocross Madness	08/98	$18.95	Starsiege	03/99	$18.95
Armored Fist 3	10/99	$17.95	Jane's Attack Pack	12/99	$17.95	Motocross Madness 2	06/00	$35.95	Start Up	08/00	$18.95
B-17 Flying Fortress 2	01/01	$44.95	Jane's F/A-18	01/00	$34.95	NASCAR Heat	09/00	$39.95	Starwars Xwing Trilogy	11/00	$29.95
Battle for Midway CFS	06/00	$28.95	Jane's USAF	10/99	$17.95	NASCAR Legends	11/99	$29.95	Steel Beasts	10/00	$42.95
Behind Enemy Lines CFS	04/00	$24.95	Janes Air Superiority Coll	08/00	$39.95	NASCAR Racing 3	09/99	$29.95	Super Bike 2000	03/00	$35.95
Castrol Honda Sbike 2000	01/00	$24.95	Jet Fighter 3 Classic	10/99	$14.95	NASCAR Revolution	02/99	$9.95	Super Bombad Racing	04/00	$39.95
Castrol Honda Superbike	05/98	$28.95	Jet Fighter 3 Platinum	11/97	$9.95	NASCAR Revolution SE	12/99	$18.95	Test Drive 5	12/98	$12.95
Colin McRae Rally	04/00	$24.95	Jet Fighter Full Burn	07/98	$12.95	NASCAR Road Racing	09/99	$14.95	Test Drive 6	12/99	$28.95
Comanche 3	04/97	$9.95							Test Drive Le Mans	04/00	$29.95
Combat Squadron WWII	11/00	$19.95							Test Drive Off Rd 2	11/98	$12.95
Corporate Pilot	12/00	$29.95							Test Drive Off Road 3	11/99	$21.95
Death Track Racing	10/00	$18.95							Tie Fghtr Cllct w/Vhcl Ref	12/98	$18.95
Destroyer Command	05/01	$39.95							Tie Fighter Coll	11/95	$24.95
Dirt Track Racing	12/99	$19.95							Tonka Space Station	11/00	$29.95
Echelon	11/00	$39.95							Tour Car Challenge	02/00	$22.95
Enemy Eng Cmnch vs. Hkm	05/00	$34.95							Tuskegee Fighters	04/00	$22.95
F-16 Agressor	06/99	$18.95							Ultim. Fligh. Ser 4	02/00	$17.95
F-22 ADF Red Sea Ops	10/98	$9.95							Ultimate Flight Srs 3	09/00	$17.95
F-22 ADF/ Red Sea Bndl	12/98	$9.95							Ultimate Motorcycle Srs	03/00	$17.95
F-22 Lightning 3	05/99	$18.95							Ultimte Flight Sries	05/97	$17.95
F-22 Raptor	12/97	$19.95							Virtual Pool Hall	12/99	$18.95
F/A-18E Super Hornet	03/00	$34.95							WW II Fighters	11/98	$18.95
F/A18 Expansion Pack	11/00	$24.95							Wings Over China	08/00	$28.95
F1 World Grand Prix 2K	06/00	$18.95							Wings of Destiny	03/00	$17.95
FA18 Korea Gold	08/00	$29.95		NHRA Drag Racing	09/99	$19.95				X-Com Interceptor	06/98	$3.95
Falcon 4.0 wBinder	12/98	$19.95	Ka-52 Team Alligator	03/00	$28.95	Nascar 2000	03/00	$36.95	X-Wing Alliance	03/99	$24.95
Falcon Gold	07/94	$8.95	Luftwaffe Commander	12/98	$14.95	Nascar Acceleration Pk	04/00	$28.95	X-Wing Collector	11/94	$18.95
Fighter Squadrn: SDOE	03/99	$18.95	MS CFS Combat Pilot 1	07/00	$28.95	Nascar Racing 4	02/01	$44.95	X-Wing Collector's Srs	06/98	$28.95
Fighters Anthology	09/97	$14.95	MS Combat Flight Sim	11/98	$28.95	Nations Fighter Command	12/99	$24.95	X-Wing Trilogy	11/00	$39.95
Flight Unlimited 3	09/99	$18.95	MS Combat Flight Sim 2	10/00	$44.95	Need Speed:Porsche Unl	03/00	$37.95	X-Wng v Tie W Blnc Pwr	10/98	$18.95
Fly 2K	08/00	$27.95	MS FS 98 Air Force One	09/98	$9.95	Private Pilot	12/00	$29.95	flight Deck FS	12/00	$18.95
Fly! 2001	03/00	$39.95	MS FS 98 Airbus 2000	11/00	$29.99	Pro Rally 2001	12/00	$34.95	iPanzer 44	04/98	$8.95

COMPUTER GAMES: ROLE PLAYING

Title	Release	Price	Title	Release	Price	Title	Release	Price	Title	Release	Price
Anachronox	03/01	$38.95	EverQuest Scars of Velious	12/00	$17.95	Rage of Mages 2	10/99	$12.95	Ultima 9 Ascension	12/99	$19.95
Arcanum	01/01	$42.95	EverQuest:Ruins Kunark	04/00	$28.95	Ravenloft 1 & 2 Bndle	02/97	$7.95	Ultima Ascnsn/Renssance	08/00	$39.95
Arena	11/94	$9.95	Final Fantasy VIII	01/00	$28.95	Revenant	10/99	$19.95	Ultima Collection	02/98	$12.95
Asheron's Call	11/99	$29.95	Forgotten Rlms Arcvs 3	08/99	$9.95	Septerra Core	11/99	$16.95	Ultima Online: Renaissance	05/00	$18.95
Baldrs Gate: Tale Swrd Cst	05/99	$18.95	Forgottn Rlms Arcvs 2	08/99	$9.95						
Baldur Gate w/EP 1	11/99	$32.95	Forgttn Rlms Silver Ed	08/99	$24.95						
Baldur's Gate	12/98	$26.95	Heroes M&M Compendium	10/97	$28.95						
Baldur's Gate II	09/00	$42.95	Icewind Dale	07/00	$38.95						
Battlespire	12/97	$14.95	Icewind Dale:Hrt of Wntr	01/01	$29.95						
Blade	10/00	$42.95	King of Dragon Pass	02/00	$37.50						
Call of Cthulhu Drk Crnrs	12/00	$42.95	Lands of Lore 3	04/99	$14.95						
Crusaders Mght&Magic	12/99	$14.95	Legacy of Kain 2	09/99	$28.95						
CyberJudas	07/96	$6.95	Legend of Blade Masters	02/01	$38.95						
Dark Stone	08/99	$16.95	Legends of Might & Magic	02/01	$44.95						
Demise Rise Ku'Tan	03/00	$39.95	M&M Millenium	10/99	$24.95						
Deus Ex	06/00	$29.95	Metal Gear Solid	10/00	$38.95						
Diablo	01/97	$9.95	Might & Magic 8	03/00	$32.95						
Diablo Bundle	10/98	$15.95	Might & Magic Compilation	11/98	$27.95						
Diablo Hellfire	12/97	$17.95	Neverwinter Nights	07/01	$48.95	SoulBringer	07/00	$28.95	Ultima Underworld 2	12/92	$6.95
Diablo II	06/00	$38.95	Nox	02/00	$38.95	Star Trek ConQuest	06/00	$24.95	Ultima Wrlds Onln Orgn	04/01	$42.95
Diablo II Expnsn Pck	04/01	$29.95	Odium	11/99	$6.95	The Summoner	03/01	$42.95	Vampire: The Masquerade	06/00	$38.95
Diablo II Gift Set	11/00	$47.95	Planescape Torment	12/99	$28.95	Throne of Darkness	02/01	$42.95	Wizardry Gold W95	05/96	$8.95
Dungeon Master 2	07/95	$14.95	Pool of Radiance 2	02/00	$39.95						
Elder Scrolls 2	09/96	$27.95	Rage of Mages	10/98	$12.95						

'BALDUR'S GATE II: SHADOW OF AMN' The newest title in the Baldur's Gate series adds new classes, spells, and items and uses an isometric, top-down view. The game is real-time but is pauseable, and actions may be assigned to characters in your party at that time.

Interplay (Roleplaying)
Release: NOW
PC CD **$38.95**

COMPUTER GAMES: ADVENTURE

Title	Release	Price	Title	Release	Price	Title	Release	Price	Title	Release	Price
102 Dalmations	11/00	$28.95	Fable	03/97	$8.95	Light Bringer	02/00	$19.95	Real Neverending Story	12/00	$42.95
7th Guest	09/97	$8.95	Fallout	10/97	$14.95	Longest Journey	06/00	$38.95	Redguard	11/98	$14.95
7th Guest 2 11th Hour	11/95	$12.95	Fallout 2	11/98	$18.95	Lotus Spring	05/00	$24.95	Return of the Phantom	07/93	$2.95
7th Guest/11th Hour	03/97	$14.95	Fallout 2 & Fallout 1	06/00	$9.95	Mankind	11/00	$19.95	Riddle Master Lu	10/95	$4.95
Abe's Exodus	12/98	$16.95	Flying Heroes	05/00	$9.95	Morpheus	10/98	$18.95	Riddle of the Sphinx	12/00	$19.95
Adrenix Crisis	07/98	$39.95	Fortrss Dr Radiaki	11/94	$8.99	Myst 2: Riven	11/97	$24.95	Ring	07/99	$24.95
Adventure at Chateau d'Or	12/00	$39.95	Gabriel Knight 3	11/99	$29.95	Myst III:Exile	03/00	$44.95	Rome Caesars Will	12/00	$39.95
Alone in Dark New Ntmre	05/00	$39.95	Gabriel Knight Coll Ed	12/98	$24.95	Myst Mstrpce Edition	09/99	$14.95	Sacred Amulet	07/00	$19.95
Alone in the Dark	02/93	$7.99	Grim Fandango J/C	10/98	$9.95	Myst:Dimensions	02/00	$39.95	Sacred Mirror of Kofun	11/96	$19.99
American McGee's Alice	11/00	$39.95	Heart of Stone	03/00	$35.95	Nancy DrewHaunte Mansion	11/00	$29.95	Safecracker	05/00	$19.95
Anarchy Online	12/00	$48.95	Hologram Time Traveler	01/00	$39.95	New Adv of Time Mchne	09/00	$28.95	Sanitarium	05/98	$14.95
Animaniacs:A Ggntc Adv	06/99	$18.99	Hype: Time Quest	11/99	$19.95	Nightlong	02/01	$19.95	Scooby Doo Ghost Town	11/00	$29.95
Animorphs	10/00	$27.95	Indy Jones Infrnl Mchne	11/99	$39.95	Nocturne	10/99	$14.95	ScooDoo Phantom Knight	11/00	$29.95
Animorphs:Know the Scrt	12/00	$35.95	Inherent Evil Hntd Htl	12/99	$14.95	Odyssey	11/00	$28.95	Scooby-Doo:Myst Fun Pk	10/99	$18.95
Arcatera	10/00	$44.95	Jewels Of the Oracle	03/95	$14.95	Omikron: Nomad Soul	11/99	$26.95	Seeker	12/00	$44.99
Atlantis 2	06/00	$24.95	Jewels Oracle 2	01/99	$19.95	Outcast	08/99	$14.95	Seven Games of the Soul	11/00	$19.95
Barbie Detective 2	11/00	$29.95	Journeyman Prjct Trlgy	05/99	$28.95	Overseer	03/98	$19.95	Simon the Sorceror 3D	12/00	$35.95
Barbie Pet Rescue	11/00	$29.95	KO8:Mask of Eternity	12/98	$14.95	Phntsmgria Stgefrght	04/99	$38.95	Star Trk Str Flt Acad	09/97	$12.95
Beyond Atlantis	07/00	$19.95							Stonekeep 2 Godmaker	07/00	$42.95
Beyond Time	12/98	$18.95							Str Trk: SFA Strgc Cmmd	05/99	$12.99
Blade Runner	11/97	$17.95							Strshp Ttnc 1st Cls Crs Kt	10/99	$37.95
Blair Witch Episode 1	10/00	$19.95							Tender Loving Care	06/99	$24.99
Blair Witch Episode 2	10/00	$19.95							The Crystal Key	02/00	$18.95
Blair Witch Episode3	11/00	$19.95							The Forgotten	02/00	$18.95
Blaze & Blade	01/00	$19.95							Time Traveller	12/00	$39.95
Buffy the Vampire Slayer	09/00	$28.95							TimeScape:Jrny to Pompeii	12/00	$19.95
Bugs Bunny & Taz:Tm Bstrs	12/00	$39.95							Timeline	11/00	$38.95
Byzantine	10/97	$12.95							Tomorrow Never Dies	12/00	$42.95
Chicken Run	11/00	$28.95							Tonic Trouble	10/99	$26.95
Clive Barker's:Undying	02/00	$42.95							Traitor's Gate	05/00	$19.95
Curse of Monkey Isle	11/97	$9.95							Under Killing Moon	11/94	$8.95
Dark Earth	10/97	$8.95							Venice Under Glass	11/00	$28.95
Dark Half	01/00	$44.99							Wheel of Time	11/99	$28.95
Dracula Resurrection II	02/00	$29.95							Wild Wild West	12/99	$18.95
Dracula:The Resurrection	06/00	$24.95	King's Quest Collection	11/99	$18.95	Prince Persia Coll LE	12/98	$18.99	X-Files Adventure Game	06/98	$19.95
Egypt 1156	12/00	$14.95	Kingdom II:Shadoan	12/00	$39.95	Prince of Persia 3D	09/99	$23.95	XFile Adv Gme&Movie Bndl	07/99	$29.95
Escape from Monkey Isle	11/00	$37.95	Lander	09/99	$14.95	Project IGI	01/00	$38.95	Zero Critical	05/99	$18.95
F13	01/00	$22.95	Last Express	04/97	$12.95	Real Myst 3D	11/00	$29.95	Zork Collection	07/00	$12.95

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Karma Labs (Roleplaying)
Release: NOW
PC CD **$39.95**

COMPUTER GAMES: SPORTS

Title	Release	Price	Title	Release	Price	Title	Release	Price	Title	Release	Price
Amercn Deer Hntr 2000	08/99	$14.95	Championship Manager5	11/00	$42.95	Football Mogul	03/99	$18.95	NHL Championship 2001	12/00	$42.99
Backyard Soccer 2001	10/00	$19.95	Championship Manager 4	06/00	$39.95	Formula 1 '99	08/00	$24.95	NHL Hockey 2001	10/00	$38.95
Baseball Mgl Wrld Srs	12/98	$28.99	Colin McRae Rally 2	02/00	$28.95	Gran Prix 3	08/00	$38.95	Offcl Frmla 1 Rcng 98	06/99	$17.95
Baseball Mogul 2000	10/99	$28.95	Daily Form Horse Racing	09/99	$14.95	IHRA Drag Racing	12/00	$37.95	PBA Bowling 2001	11/00	$39.95
Bass Pro Fishing	06/98	$12.95	Deer Hunter 3 Gold	03/00	$19.95	Insane	02/01	$38.95	Rcky Mtn Trphy Hntr 2	10/99	$17.95
Beetle Buggin Racing	06/00	$19.95	Deer Hunter 4	09/00	$19.95	KO Boxing	06/00	$27.95	Roland Garros 2000	12/00	$19.95
Bird Hunter Upland Ed	11/00	$18.95	Dirt Track Rcg Sprnt Crs	10/00	$19.95	Links LS 2000	10/99	$38.95	Skip Barber Racing	02/01	$38.95
Bird Hunter:Wild Wings	09/00	$19.95	Expert Pool	03/00	$18.95	Links LS 2000 10-Crs Pk	02/00	$18.95	Snowmobile Chmpshp 2000	12/99	$18.95
Black Bass w/Hnk Prkr	04/00	$22.95	F&Stream Trphy Buck 3D	03/00	$29.95	Links LS 2000 Classic	11/00	$29.95	Superbike 2001	09/00	$38.95
Brnswk Pro Pool 3D 2	04/00	$17.95	F1 2000	03/00	$19.95	Links LS 2001	11/00	$44.95	Sydney 2000	08/00	$28.95
Browning African Safari	03/00	$18.95	F1 Championship 2000	11/00	$38.95	Madden NFL 2001	08/00	$39.95	Tiger Woods 2001	11/00	$39.95
Buckmasters Deer Hunting	09/00	$24.95	F1 World Gran Prix 99	06/00	$22.95	Microsoft Baseball 2001	05/00	$29.95	Tony Hawks Pro Skater 2	10/00	$34.95
Buick Tournament Courses	11/00	$18.95	FIFA Soccer 2001	11/00	$38.95	Motocross Mania	11/00	$19.95	Triple Play 2001	03/00	$24.95
Cabela Big Gme Hntr 3	12/99	$14.95	Field & Stream Trphy Bss	04/00	$28.95	Mountain Game Hunter	09/99	$9.95	US Open 2000	01/01	$19.95
Cabela's BGH 4	09/00	$18.95	Flintstone's Bowling Gme	11/00	$18.95	NBA Basketball 2001	12/00	$42.99	Virtual Pool 3	11/00	$28.95

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COMING soon

On Deck

There once was this guy who 11 years ago worked for some Canadian company. He made a game called *Hardball II*, and people really liked it. He followed that up with something called *4D Boxing*, which was one of the unsung heroes of gaming, a full 3D boxing game with polygonal fighters (that looked really weird). And people really liked it. He switched over to managing titles and stopped making games. For a while. Then EA Sports came a calling, and the original *Triple Play Baseball* was the result.

Bases Loaded

But now was the time for a true change. Did this guy go off to make a big sports game for some other publisher? Nope. Instead, he went to this upstart company called **Cavedog** and created a little game called *Total Annihilation*. And people really, really liked it. He followed that up with its expansion, *The Core Contingency*. And again, people really, really liked it.

Step Up to the Plate

Now this guy, we'll call him Chris Taylor (for lack of a less accurate name), decided to do something really different. He founded his own company, **Gas Powered Games**, in May of 1998 and decided to head into the dark underside of gaming. Not just by partnering with Microsoft (ouch), but to create a little something called *Dungeon Siege*. Think role-playing. Action. A seamless world with no loading. A simple interface. Kind of like *Diablo*, but better. That's the theory, at least.

ISSUE 124. ON SALE FEBRUARY 6TH.

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